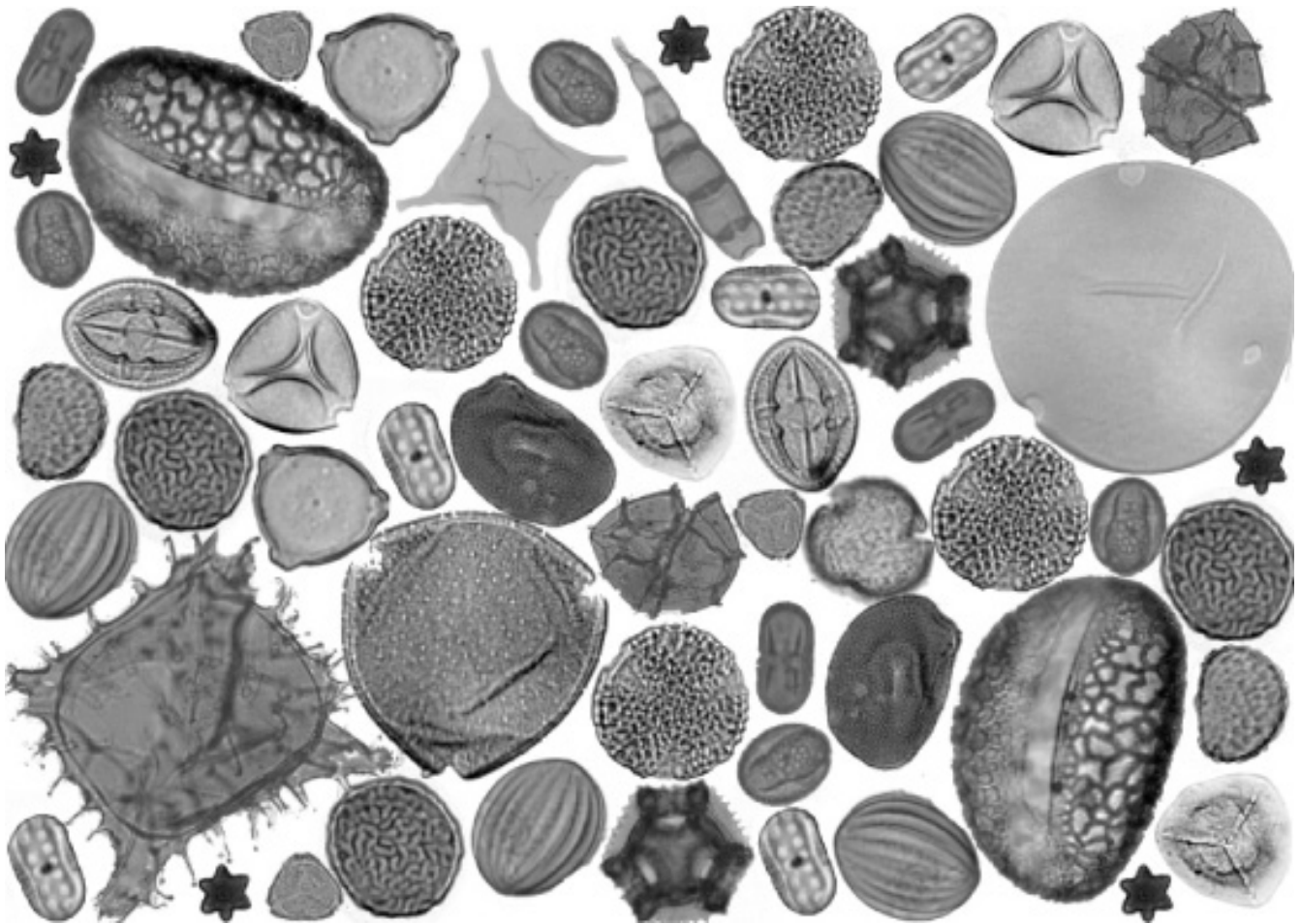




AASP – The Palynological Society

Promoting the Scientific Understanding of Palynology since 1967



NEWSLETTER

December 2018
Volume 51, Number 4

Published Quarterly



AASP – TPS NEWSLETTER

Published Quarterly by AASP – The Palynological Society

December 2018, Volume 51, Number 4

CONTENTS

- Page 3** | List of AASP-TPS awardees
- Page 4** | Board of Directors and upcoming deadlines
- Page 5** | A Message from our President
- Page 6** | Managing Editor's Report
- Page 8** | Candidates to the Board of Directors 2019
- Page 12** | Overview of AASP-TPS Awards and Research Grants
- Page 15** | In Memoriam...
- Page 18** | News from...
- Page 20** | Book Reviews
- Page 21** | Meetings Report
- Page 28** | Call to Serve - Newsletter open positions
- Page 29** | AASP Foundation Century Club
- Page 30** | Upcoming AASP-TPS Meetings
- Page 31** | 52nd AASP-TPS Annual Meeting - Second Circular
- Page 33** | Other Meetings and Workshops of Interest



AASP

The Palynological Society

The American Association of Stratigraphic Palynologists, Inc. - AASP - The Palynological Society - was established in 1967 by a group of 31 founding members to promote the science of palynology. Today AASP has a world-wide membership of about 800 and is run by an executive comprising an elected Board of Directors and subsidiary boards and committees. AASP welcomes new members.

The AASP Foundation publishes the journal *Palynology* (quarterly), the *AASP Newsletter* (quarterly), and the *AASP Contributions Series* (mostly monographs, issued irregularly), as well as several books and miscellaneous items. AASP organises an Annual Meeting which usually includes a field trip, a business luncheon, social events, and technical sessions where research results are presented on all aspects of palynology.

AASP Scientific Medal recipients

Professor William R. Evitt (awarded 1982)
Professor William G. Chaloner (awarded 1984)
Dr. Lewis E. Stover (awarded 1988)
Dr. Graham Lee Williams (awarded 1996)
Dr. Hans Gocht (awarded 1996)
Professor Svein B. Manum (awarded 2002)
Professor Barrie Dale (awarded 2004)
Dr. David Wall (awarded 2004)
Dr. Robin Helby (awarded 2005)
Dr. Satish K. Srivastava (awarded 2006)
Professor Estella B. Leopold (awarded 2013)
Professor Vaughn M. Bryant (awarded 2016)
Professor David Batten (awarded 2018)

AASP Honorary Members

Professor Dr. Alfred Eisenack (elected 1975)
Dr. William S. Hoffmeister (elected 1975)
Professor Leonard R. Wilson (elected 1975)
Professor Knut Faegri (elected 1977)
Professor Charles Downie (elected 1982)
Professor William R. Evitt (elected 1989)
Professor Lucy M. Cranwell (elected 1989)
Dr. Tamara F. Vozzhennikova (elected 1990)
Professor Aural T. Cross (elected 1991)
Dr. Robert T. Clarke (awarded 2002)
Professor Vaughn Bryant (awarded 2005)
Professor Alfred Traverse (awarded 2005)
Professor Bernard Owens (awarded 2011)
Dr. John E. Williams (awarded 2013)
Mr. Paul W. Nygreen (awarded 2013)
Professor Norman Norton (awarded 2016)

AASP Board of Directors Award recipient

Dr. Robert T. Clarke (awarded 1994)
Dr. Thomas D. Demchuk (awarded 2014)

Teaching medal recipients

Professor Aural T. Cross (awarded 1999)
Professor Alfred Traverse (awarded 2001)
Professor Bill Evitt (awarded 2006)
Professor Vaughn M. Bryant (awarded 2013)
Professor Geoffrey Clayton (awarded 2016)

AASP Distinguished Service Award recipients

Dr. Robert T. Clarke (awarded 1978)
Dr. Norman J. Norton (awarded 1978)
Dr. Jack D. Burgess (awarded 1982)
Dr. Richard W. Hedlund (awarded 1982)
Dr. John A. Clendening (awarded 1987)
Dr. Kenneth M. Piel (awarded 1990)
Dr. Gordon D. Wood (awarded 1993)
Dr. Jan Jansonius (awarded 1995)
Dr. D. Colin McGregor (awarded 1995)
Professor John H. Wrenn (awarded 1998)
Professor Vaughn M. Bryant (awarded 1999)
Dr. Donald W. Engelhardt (awarded 2000)
Dr. David T. Pocknall (awarded 2005)
Dr. David K. Goodman (awarded 2005)
Professor Owen K. Davis (awarded 2005)
Dr. Thomas Demchuk (awarded 2009)
Professor Reed Wicander (awarded 2014)
Professor Fredrick Rich (awarded 2016)
Dr. James B. Riding (awarded 2016)



AASP – TPS NEWSLETTER

Published Quarterly by AASP - The Palynological Society

December 2018
ISSN 0732-6041

Volume 51, Number 4
Gilda Lopes, Editor

BOARD OF DIRECTORS

President
President Elect
Secretary
Treasurer
Managing Editor
Webmaster
Newsletter Editor
Directors at Large

Gunn Mangerud
Katrin Ruckwied
Stephen Stukins
Rebecca Hackworth
James Riding
Fabienne Marret
Gilda Lopes
Sofie Lindström
Annette Götz
Julia Gravendyck

AASP NEWSLETTER CORRESPONDENTS

Kasia K. Śliwińska
Annette Götz
Ingrid Romero Valero
– *Currently Vacant* –
Peta Mudie and Elena Marinova
Philippe Steemans
Stephen Louwye
– *Currently Vacant* –
– *Currently Vacant* –
A. Wheeler, J.J. Cooling, V.A. Korasidis
Andres Pardo Trujillo

Nordic Countries
United Kingdom
United States
India
Black Sea region
French-speaking Belgium
Flemish-speaking Belgium
South Africa
Asia
Australia
South America

AASP BOOK REVIEW EDITOR

– *Currently Vacant* –

To express interest in open correspondent positions, please send an email to:
gildamlopes83@gmail.com

AASP WEBMASTER

Fabienne Marret, aaspwebmaster@gmail.com, website: <http://www.palynology.org>

AASP NEWSLETTER EDITOR

Gilda Lopes, gildamlopes83@gmail.com, Porto, Portugal

AASP NEWSLETTER GRAPHIC DESIGN (December 2018 Issue)

Filipe Barreira, Laboratório Nacional de Energia e Geologia (LNEG), S. Mamede Infesta, Portugal

The AASP-TPS Newsletter is published four times annually. Members are encouraged to submit articles, “letters to the editor,” technical notes, meetings reports, information about “members in the news,” new websites and information about job openings. Every effort will be made to publish all information received from our membership. Contributions which include photographs should be submitted two weeks before the deadline.

Deadline for submission for the next issue of the newsletter is FEBRUARY 15. All information should be sent by email. If possible, please illustrate your contribution with art, line drawings, eye-catching logos, black & white photos, colour photos, etc. **We DO look forward to contributions from our membership.**

A Message From Our President

Dear AASP-TPS Members,

It seems a long time since our great AASP Annual Meeting in Calgary. For those of us living “far up north,” it is dark as we go to work and dark when we leave for home. It is a time to get a lot of work done!

AASP – The Palynological Society is doing well. One important mission is spreading good, high-quality palynological work. It is therefore good news that our journal *Palynology* seems to be running so well. During the last year or so, most of you have probably been aware of the fact that accepted papers turn up relatively quickly online. However, we have quite a big backlog concerning prints. This must indeed be seen as a positive signal as it implies that *Palynology* is running well and is becoming increasingly important! The Board, therefore,

decided on a 100 pages increase (per year) to help solve this situation. We are presently at 568 pages, so that gives us 668 pages in 2019. As *Palynology* provides important funding for the association, this increase has a small cost but gives us higher royalties so the Board believes this is a sustainable way forward and demonstrates the success of the Journal. A high-quality journal requires excellent editorial work, and it is indeed a lot of work and hard work. I will, therefore, take this opportunity to give our Managing Editor James Riding big thanks, and extend this to our two Assistant Editors Matthew J. Pound and Niall W. Paterson. They all do a fantastic job for the Society.

Two small reminders at the end:

1. Getting new members and retaining members is constantly on our agenda.



As a not-for-profit organization, members and member engagement are crucial. In my last presidential letter, I presented AASP's new policy on the recruitment of members from low-income countries. Please help us share this possibility to your colleagues in these countries. ...and please help us recruit new members among your students and colleagues wherever you work.

2. It is soon time to vote for new members, so don't forget to vote! The Board is essential in running AASP and as in all elections, your vote counts!

I wish you all a nice and productive fall and winter!

Gunn

Managing Editor's Report

The final part of Volume 42 of *Palynology* will be published online during late October. This issue is Part 4, and it comprises 12 research papers plus an obituary for Peter A. Hochuli (1946–2018). All these items are already available on the website unpaginated, and the contents of this issue are reproduced below. It will also of course be printed and the paper copies will be distributed, together with Part 3, in early November. We have plenty of papers ready to be printed during 2019, but Volume 43 is nowhere near full at this stage due to the recent substantial increase in the page budget to 668 per year.

I mentioned last time that we changed typesetters during 2018. A paper by Fang Gu and others was published online on the 29th of June 2018, and was the last one processed by the old contractors. Recently, the stream of papers produced by our new typesetters began with papers by Torres et al. and Martinelli et al. being placed online.

More will be coming out online in the coming days and weeks.

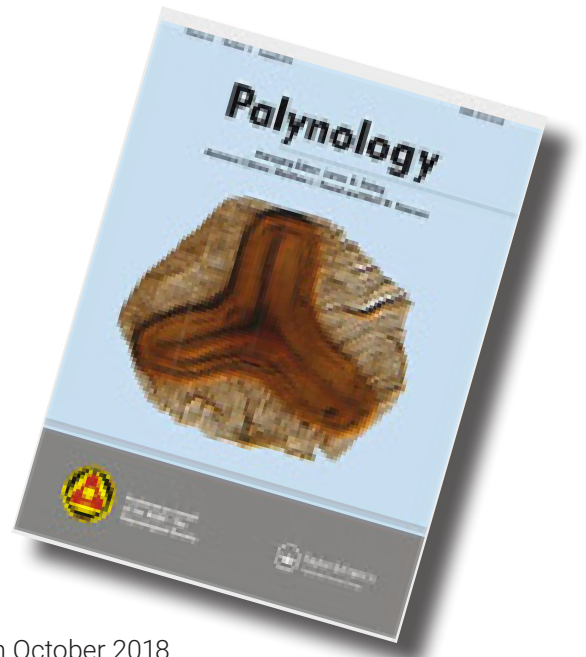
The Supplement to Volume 42 on the dinoflagellate genus *Spiniferites*, which is being guest-edited by Kenneth Mertens, is very nearly ready. There remains only one article to be finalised. This Supplement will be published online later this year; please note that it will not be paper-printed.

News on the *Contributions Series* front is that a major paper on the *Cyclonephelium* group of dinoflagellate cysts by Rob Fensome and three others is currently being revised by the authors and so should soon be in the production process.

James B. Riding
Managing Editor, AASP – The Palynological Society

British Geological Survey
Keyworth
Nottingham NG12 5GG
United Kingdom

Tel: +44 (0)115 9363447
E-mail: jbri@bgs.ac.uk



17th October 2018

The contents of *Palynology*

Volume 42, Part 4

(November 2018)

1. Schneebeli-Hermann, E., Bucher, H., Weisert, H., Heimhofer, U., Mangerud, G. and Riding, J.B. 2018. Obituary. Peter Andreas Hochuli (1946–2018).
2. Tanrikulu, S., Doyle, J.A. and Delusina, I. Early Cretaceous (Albian) spores and pollen from the Glen Rose Formation of Texas and their significance for correlation of the Potomac Group.
3. Becker, B.F., da Silva-Caminha, S.A.F., Guerreiro, R.L., de Oliveira, E.J. D'Apolito, C. and Assine, M.L. Late Holocene palynology of a saline lake in the Pantanal of Nhecolândia, Brazil.
4. Perrotti, A.G., Siskind, T., Bryant, M.K. and Bryant, V.M. Efficacy of sonication-assisted sieving on Quaternary pollen samples.
5. Bajpai, R. and Kar, R. Modern pollen deposition in glacial settings in the Himalaya (India): abundance of *Pinus* pollen and its significance.
6. Ramos Giacosa, J.P. and Barakat, M.C. Spore morphology and wall ultrastructure of *Actinostachys pennula* (Sw.) Hook. and *A. subtrijuga* (Mart.) C. Presl. (Schizaeaceae).
7. Steemans, P. and Wellman, C.H. A key for the identification of cryptospores.
8. Bera, S.K., Tripathi, S., Gupta, S.C. and Bera, S. Pollen and spores in yellow rain from Lucknow, northern India.
9. Türkecan, A.T., Munsterman, D., Işık, U., Altiner, D., Pinar, M., Çevik, T. and Alay, Z. Dinoflagellate cyst biostratigraphy of Miocene strata in the Adana Basin, Eastern Mediterranean, Turkey.
10. Sahney, M., Rahi, S., Kumar, A. and Jaiswal, R. Melissopalynological studies on winter honeys from Allahabad, Uttar Pradesh, India.
11. Marinho, E.B., Bove, C.P., Mendonça, C.B.F. and Gonçalves-Esteves, V. Pollen morphology of *Mourera* (Podostemaceae).
12. Wan, C., Bai, X. and Liu, J. Pollen morphology of Chinese Sileneae and its systematic significance.
13. Siddhanta, S., Bera, S. and Maity, D. A note on a new pollen aperture in *Capsella bursa-pastoris* (L.) Medik. from Sikkim Himalaya.



Candidates to the Board of Directors 2019

Introducing the 2019 candidates for the board of directors in the following positions: Secretary, Managing Editor, Treasurer and Director-at-Large.



Stephen Stukins

Secretary

After studying a BSc in Geological Sciences at University of Leeds I undertook the MSc in Micro-palaeontology at Univer-

sity College London in '05-'06. It was at UCL I first discovered palynology and went on to use it in my final project studying the onset of the Toarcian OAE from the Yorkshire coast under the supervision of Susanne Feist-Burkhardt and Andrew Henderson.

I then ventured on to the University of Aberdeen for my PhD, supervised by David Jolley, Duncan McIlroy (Memorial University of Newfoundland) and Adrian Hartley. This research project, funded by Statoil (UK), took me to Argentina where I studied the palynology and sedimentology of the Middle Jurassic of the Neuquén Basin from its stunning outcrops.

Following my doctorate I worked for PetroStrat Ltd in Conwy, North Wales, where I trained and worked on Mesozoic sections from West Africa and various sectors of the North Sea. Then the opportunity arose to join the Natural History Museum, London, where I have been since January 2012. During my time at the NHM I have been able to broaden my involvement in palynology and micropalaeontology, such as: exploring ways to promote and digitise the John Williams Index of Palaeopalynology; hosting The Micropalaeontological Society conference on the past, present and future

of the IODP; and instigating new research proposals for working with the museum collections and on material collected during numerous field visits.

I currently teach Applied Biostratigraphy on the Petroleum Geoscience MSc courses at Royal Holloway University and Imperial College London. In the last few years I have also supervised several students from the University of Birmingham and Imperial College London who have used the former British Petroleum Collection or the John Williams Index of Palaeopalynology as sources of research material.



Rebecca Hackworth

Treasurer

Rebecca Hackworth is currently working within the Energy Technology Center as a biostratigrapher at Chevron Corporation based in Houston, Texas.

Rebecca received her BSc degree in Geology (2001) from Louisiana State University in Baton Rouge where she became introduced to foraminifera. This interest in foraminifera sent her to the cold Midwest where she received her MSc degree in Geology (2003) from the University of Wisconsin- Madison. Her research focused on the stable isotopic stratigraphy and foraminiferal biostratigraphy during the latest Miocene Stable Isotope event (~7.7 M.a.). After completing MSc degree, she embarked on a journey into the world of palynology, returning to Louisiana State University to start a PhD with Dr. John Wrenn. John not only introduced her to palynology, but together they explored the fascinating world of silicious plant microfossils, phytoliths. In addition, working with

John enabled her to become familiar with the extensive wealth of resources available at the Center for Excellence in Palynology (CENEX). Her research involved a multidisciplinary approach (i.e. pollen, phytoliths, MS, and stable isotopes) to investigating the latest Holocene vegetational and hydrological changes documented at Catahoula Lake, Louisiana.

During her PhD she interned as a palynomorph biostratigrapher at BP in 2008, where she received training and exposure to gulf coast Cenozoic and Mesozoic dinoflagellates, spores, and pollen. Upon completing her PhD in 2009, under the advisement of Drs. Sophie Warny and Brooks Ellwood, she began her career at BP. She worked for British Petroleum for 5 years within the GoM exploration and production teams before accepting the position at Chevron in 2014.



James Riding
Managing Editor

James B. Riding is a palynologist with the British Geological Survey (BGS), based in Nottingham, UK, and specializing on the

Mesozoic and Cenozoic. After studying geology at the University of Leicester, Jim pursued an interest in palynology which developed as an undergraduate. This started with the famous MSc course in palynology at the University of Sheffield directed by Roger Neves and the late Charles Downie. He left Sheffield for BGS, which was then known as the Institute of Geological Sciences, joining the Palaeontological Department run by the legendary Carboniferous palaeontologist and geologist W.H.C. (Bill) Ramsbottom in the Northern England office, based in Leeds, West Yorkshire. Here, he worked closely with Ron Woollam on the Mesozoic palynology of onshore and offshore UK; much of the work in those days

was on the North Sea. The Leeds office was closed, and Jim and colleagues relocated to the BGS headquarters at Keyworth, immediately south of Nottingham. He was awarded a PhD by the University of Sheffield for a thesis on the Jurassic dinoflagellate cyst floras of northern and eastern England. His current palynological interests are wide-ranging and include the Mesozoic-Cenozoic palynology of the world (especially Europe, Australasia, Antarctica, west Africa, the Americas, Russia and the Middle East), paleoenvironmental palynology, palynomorph floral provinces, forensic palynology, preparation techniques, the history of palynology and the morphology, systematics and taxonomy of dinoflagellate cysts. The British Antarctic Survey, a sister organisation to BGS, have used Jim as a consultant palynologist for many years, and he visited the Antarctic Peninsula for fieldwork during the Austral Summers of 1989 and 2006.

The most recent field season was spent on Seymour Island. The European Union has recently funded two collaborative projects involving Jim on research into the Jurassic palynology of Russia and southern Europe. Jim undertook a one-year secondment in 1999-2000 to the Australian Geological Survey Organisation (now Geoscience Australia), Canberra, Australia where he worked on the taxonomy of Australian Jurassic dinoflagellate cysts with Robin Helby and Clinton Foster. The work emanating from this was published in 2001 as Memoir 24 of the Association of Australasian Palaeontologists. Jim was awarded a DSc by the University of Leicester in 2003. He served as a Director-at-Large of AASP between 1999 and 2001, was President in 2003, and became Managing Editor in 2004. He has previously served as Secretary and Treasurer of The Micropalaeontological Society (TMS). Jim is currently the Secretary-Treasurer of the International Federation of Palynological Societies (IFPS).



Kimberley Bell

Director-at-Large

The microscopic world of palynology immediately captivated me when Dr. Leonard Hills (University of Calgary, now deceased)

first introduced me to paleopalynology in 2007. I joined the palynology lab at the Geological Survey of Canada (Calgary) in 2008 and with their support, completed an honours thesis on Late Cretaceous terrestrial palynostratigraphy as part of my undergraduate studies. In 2011, I received a BSc Honours in Geology and a BSc in Environmental Science from the University of Calgary. Spring of 2018 marked the completion of my PhD in the Department of Geoscience at the University of Calgary under the co-supervision of Dr. Arthur Sweet (Geological Survey of Canada, now deceased) and Dr. Charles Henderson (University of Calgary). My research interests include Cretaceous and Paleogene palynology, and its application to biostratigraphy, paleoecology and biochronology. I have a passion for taxonomic and phylogenetic studies of angiosperm pollen, and I am interested in interdisciplinary studies linking palynology, paleobotany, lithostratigraphy and regional basin analyses from both sequence stratigraphic and tectonic perspectives.

I was an active member of AASP-The Palynological Society during my time as a graduate student, and through the society I benefited from many opportunities, awards and scholarships. I served as the inaugural student director-at-large from 2014 to 2016 and co-organized the 51st Annual Meeting of AASP-TPS joint with the Annual General Meeting of the Canadian Association of Palynologists (CAP) in Calgary with Dr. Thomas Demchuk (RPS), which was held this past August. I am currently a Research Scientist-Palynologist at the Geological Survey of Canada (Calgary) and it would be my pleasure to give back to the society by serving another term on the Board

of Directors. I have been fortunate to receive mentorship, guidance and encouragement from members of AASP-TPS whom I have met at annual meetings. This organization has afforded me many opportunities for professional growth as a palynologist and it is an honour to be nominated as a candidate for the director-at-large position. I would truly value the opportunity to contribute to the continued success of AASP-TPS and look forward to seeing you at the 2019 meeting in Belgium!



Kenneth Neil Mertens

Director-at-Large

Kenneth is a researcher for Ifremer, based in Concarneau, France since 2016. His research inter-

ests are the taxonomy, evolution, phylogeny, and biogeography of dinoflagellates and their cysts, and the palaeoceanographical application of dinoflagellate cysts, particularly in the Quaternary and Neogene.

He received his PhD in 2009 from Ghent University (Belgium) under Stephen Louwye, which focused on the palaeoceanographical application of dinocysts and coccoliths from the late Quaternary of Gulf of Cádiz and Cariaco Basin. During this PhD he got interested in the application of process length variation of dinocysts for salinity reconstruction. After his PhD, he was a postdoc for six years at Ghent University, continuing his work on the morphological variation of dinocysts. This FWO-funded postdoc led him to specialize in establishing cyst-motile relationships and single-cell PCR and phylogenetics. During this postdoc he had long term stays with Marianne Ellegaard at the University of Copenhagen, with Anne de Vernal at GEOTOP in Montreal, and with Gerard Versteegh at Bremen University. He was also hosted by Kazumi Matsuoka at Nagasaki University for one year thanks to

a JSPS fellowship. His research has become more and more paleobiological, combining biological (genetics, culturing, toxicology) with geological (paleontological) techniques.

I think my paleobiological interests would make me an original director-at-large, which hopes to bring back Bill Evitt's and Barrie Dale's perspectives, that aim to draw in more biological approaches into the society.



Michael S. Zavada

Director-at-Large

Born and raised in Bridgeport, Connecticut. He received his BSc and MSc degree in Botany/Palynology from Arizona

State University, Tempe under the guidance of Dr. James E. Canright. He received a BA in Slavic Languages, and a PhD in Ecology and Evolutionary Biology from the University of Connecticut, Storrs. He spent one year as a Fulbright Scholar in Skopje, Macedonia at the Geologic Institute, and the Center for Foreign Languages. He did post-doctoral work with David Dilcher at Indiana University, Bloomington, and Thomas Taylor at Ohio State University, Columbus. He has served on the faculties of The University of the Witwatersrand and the Bernard Price Institute of Paleontology, Johannesburg, South Africa, The University of Louisiana-Lafayette, was Professor and Chairman of the Department of Biology at Providence College, Providence, RI, and East Tennessee State University, Johnson City, TN. He served as Dean of the College of Arts and Sciences at Seton Hall University, New Jersey and is currently Dean of The College of Arts and Sciences at University of Texas of the Permian Basin.

He has broad and varied interest in palynology. His research interests include elucidating the time and place of origin of the angiosperms. Pollen has a number of characteristics for

tracking the time, place and early diversification of a variety of taxonomic groups. He has taken a broad approach in evaluating the taxonomic significance of these pollen characters. His palynological data includes ultrastructural studies (light, scanning electron and transmission electron microscopy) of the extant primitive angiosperms (e.g., basal dicots and monocots, *Hamamelidae*), dispersed fossil pollen of gymnosperm and angiosperm affinity from five of the seven continents, and pollen found in fossilized reproductive structures of various gymnosperm, pteridosperm and angiosperm taxa of the Permian, Mesozoic and Cenozoic. His interests also include the functional significance of pollen characters. This may provide insight into the selective pressures that brought about angiosperm pollen characters. This area of his research has been more empirical, and has taken him into disciplines such as the physical sciences (engineering), pollination and reproductive biology (particularly angiosperm self-incompatibility), plant physiology, and development. Another area of investigation that has grown out of the ultrastructural work is an interest in the floristic development in the fynbos of South Africa, and the extant and fossil flora of Madagascar. He has ongoing interest in stratigraphic palynology, paleoecology, the application of paleobotany and palynology to archeology, ethnobotany, and aerobiology (airborne particles and public health). He has received over \$6 million in grants and solicited funds, including grants from the National Science Foundation, National Institute of Health, NASA, American Philosophical Society, and National Geographic Society. He has published over 90 papers. His broad interests in palynology will help him serve the broad membership of AASP-The Palynological Society.

In addition to his academic interests, he played baseball at Arizona State University, participate in a variety of sports, and outdoor activities, he enjoys travel, and is an instrument rated private pilot.

Overview of AASP-TPS Awards and Research Grants

Niall W. Paterson

Awards Committee Chairman

AASP – The Palynological Society has a number of awards that recognize outstanding service, to the Society or to the science of palynology.

The basic nomination procedure is similar for most awards (main letter of nomination accompanied by letters of support, which include documentation of accomplishment). Details of the procedures for each award can be found at <https://palynology.org/award-procedures/>.

The deadline for submission of nominations to the Awards Committee is **March 1** of each year.

A complete list of previous winners can be found on the third page of this newsletter.

Distinguished Service Award

This award recognizes individuals who have generously supported the Society with their work and resources over a number of years, and whose efforts have advanced the Society. Typically, recipients have held society office, participated in committees, or dealt with publications or meetings. There have been 19 recipients of this award, most recently Fred Rich and Jim Riding in 2016.

Honorary Life Membership

This is actually the oldest AASP award with the first awards dating to 1975. This award is either given to people making fundamental contributions to the science of palynology, or to people who have given devoted service to the AASP, or both. Honorary Life Membership has been awarded to 16 individuals, most recently to Norm Norton in 2016.

Medal for Excellence in Education

This medal recognizes leaders in palynological instruction. Nominees are expected to have considerable experience and accomplishment in all aspects of academic education involving palynology, including training of new scientists for the field. The medal has been awarded four times, most recently to Geoff Clayton in 2016.

Medal for Scientific Excellence

The Society's highest award for achievement in the science of palynology is the Medal for Scientific Excellence. The official description lists "fundamental contributions to the development of the science of palynology" as the main criterion. Recipients should have a substantial research history in the field. The medal has been awarded 11 times in the history of the Society, most recently to Vaughn Bryant in 2016.

Undergraduate Student Awards

In order to support the teaching of palynology at the undergraduate level, and to encourage and reward student achievement, AASP-The Palynological Society offers the Undergraduate Student Award.

The awards are made annually to students nominated by faculty members teaching courses with significant palynological content. One student recipient, with meritorious achievement in some aspect of the course, can be nominated per year per institution.

The following institutions already have approved courses from which undergraduate students may be selected: University of Southampton, Louisiana State University, University of Tennessee-Knoxville, University of Portsmouth and Morehead State University.

A faculty member, who is a member in good standing of AASP-TPS, and who teaches an appropriate course, may nominate the course using the Registration Format found below. This should be cut-and-pasted into a word document and sent to the Awards Committee Chair at: niall.paterson@uib.no.

Upon approval by the Awards Committee, members of faculty teaching approved courses may nominate a student to receive the award, at any time of the year, by sending the name, address, and email address of the recipient to the Awards Committee Chair and Secretary (s.stukins@nhm.ac.uk). Additionally, faculty must send the name of the winner, a paragraph about their achievements, and a photograph to the newsletter editor (gildamlopes83@gmail.com) for inclusion in the March newsletter (for awards made between July and December) or June newsletter (for awards made between January and June) each year.

Each award consists of one year's free membership to the Society, which includes digital issues of the Society's publications, the journal *Palynology* and the quarterly newsletter, discounted registration fees at Society meetings, and eligibility for Society awards.

AASP Undergraduate Student Award – Course Registration Form

Nominating faculty member:
University/Higher Education Institution:
Course Name:
Course Description and level:
Average number of students registered in the course annually:
Number of hours of palynological instruction:
Criteria used to determine the winning student:
Date:

Student Awards for Travel to the Annual Meeting in Ghent

The AASP – The Palynological Society will support travel for student members presenting talks or posters at the upcoming annual meeting, which will take place in Ghent, Belgium, 1–3 July 2019 <https://palynology.org/aasp-annual-meeting-2019/>.

The amount of funding awarded for the travel award is variable based on need. The committee has been allocated up to \$1500 to divide among successful applicants.

Applications MUST include the following:

- 1) One paragraph justifying the request, plus a description of the research to be presented (including the submitted abstract) *
- 2) A photograph of the applicant *
- 3) An outline of the amount requested, and how the funds will be used
- 4) Applicant's email and postal addresses

The above should be forwarded by the applicant's advisor, and accompanied by a brief explanation of how attendance at the Annual Meeting will benefit the student.

The deadline for applications for Student Travel Grants will be **February 28, 2019**.

Applicants MUST be members of the Society to be eligible for consideration <https://palynology.org/membership-options-page/>.

Travel Grant Applications should be submitted to the Chair of the Awards Committee who will make recommendations after consultation with the committee:

Niall W. Paterson
Dept. of Earth Science, University of Bergen
niall.paterson@uib.no

* Please note that in order to receive the funds, successful applicants MUST forward their request justification, research description and a photograph to the Newsletter Editor (Gilda Lopes; gildamlopes83@gmail.com). These will feature in the September Newsletter following the annual meeting.

2019 AASP Student Research Grants

The Society will entertain applications for Student Research Grants with a deadline of **March 31, 2019**.

This year the Society is offering two Student Research grants of up to US\$3000 each to be awarded to successful applicants.

These Student Research Grants support research in any area of palynology. Ordinarily, the grants will be offered to 'beginning' graduate students, but advanced undergraduates may also apply. Student Research Grants are to be used for costs directly connected to carrying out research, such as fieldwork and laboratory expenses. The qualification of the student, the originality and imagination evident in the proposed project, and the likelihood of significant contribution to the science of palynology are factors that will be weighed in the selection of award winners.

Previous winners of this award are eligible only if they are pursuing a different degree than the one they were pursuing when they received the previous award. Additionally, applicants MUST be members of the Society <https://palynology.org/membership-options-page/>.

Application forms can be downloaded from our website at <http://www.palynology.org/student-support>.

Inquiries and completed application materials should be sent electronically to the Chair of the AASP Awards Committee:

Niall W. Paterson
Dept. of Earth Science, University of Bergen
niall.paterson@uib.no

Advice on preparing an effective application for an AASP Student Research Grant

The single most valuable piece of advice is "know and write to your audience."

You have only a very limited space to describe your project, so use the words wisely. Writing briefly is more difficult than writing at length, but is worth the effort. Literature review should be at a minimum, and the problem you aim to solve through your study should be emphasized. Keep in mind that the Awards Committee does not know context for your project, and may not even have a closely related specialty in palynology. Thus, it is important to write for this broader audience.

It can be a good idea to show your text to someone who is not a palynologist or involved in the project to see if they understand your description well. The committee encourages projects that integrate palynology with other data; however, it should be clear what palynological work you will be performing. If there is prior palynological work, please explain how your approach is new or different.



In Memoriam...

Lanny Fisk

By Joyce Lucas-Clark and Thomas Demchuk

Excerpts taken from Legacy.com



Fisk Dr, Lanny Herbert
1944-2018 beloved
brother, father, and friend,
left the Earth and life he
loved on July 19, 2018.
He resided in Grass Val-
ley, California. Lanny
was born to Paul J and

Mildred (Courser) Fisk on February 24, 1944. He graduated from Vestaburg High School in 1962. In January of 1967 he married Carolyn McDowell of Detroit, MI. He was drafted into the U.S. [Army](#) and served as a Medical Specialist at the U.S. Pentagon from 1967-1969. Following his honorable discharge, he moved to Berrien Springs, Michigan where he completed an undergraduate degree at Andrews University in 1971. After earning his PhD in Biology, with emphasis on Paleobotany, from Loma Linda University (LLU) in Loma Linda, California he taught at Walla Walla College (WWC) in Walla Walla, Washington. He then pursued postdoctoral studies in Petroleum Geology at [Michigan State University](#).

Life-long research took Lanny around the world, but his favorite was conducted at Yellowstone National Park where he had graduate students working under him doing research on the petrified forests of YNP. His research, often in collaboration with valued colleagues, has been published in several journals, including but not limited to, The Journal of Paleontology. Geological Society of America (GSA) was the first professional organization he joined and went on to become a member of the Paleontological Society as well as too many others to name. He held teaching positions at WWC,

LLU, and most recently, American River College in Sacramento, California. While at LLU, he and Dr. William J Fritz incorporated F & F GeoResource Associates, Inc. In 1982 Lanny created, as the Senior Paleontologist and Chief Executive Officer, the consulting firm of Paleo-Resource Consultants, DBA of F & F. In 1993 he was appointed by the Governor of Oregon to serve on the Board of the Oregon Department of Geology and Mineral Industries, which he did through 1998.

Lanny was very active in AASP-The Palynological Society over the past many years. He was President of the Society in 2014: prior to that he was President-Elect (2013) and then Past-President (2015). While he was President-Elect he hosted and organized the 2014 AASP-TPS Annual Meeting in San Francisco. Lanny fulfilled many wishes of hosting that meeting in San Francisco, with a 60's theme t-shirt, the venue in downtown, and a geologically oriented fieldtrip to the wine country. Over the past decade Lanny was ever present at AASP-TPS annual meetings giving presentations, participating in board meetings, and participating in other Society activities.

Right up until his passing, Lanny was organizing projects and studies involving fieldwork and travel. He was full of incredible energy and enthusiasm. He had just been talking with Joyce Lucas-Clark about a new project on the California Eocene-Oligocene stratigraphic problems, and had longer term plans for working on the Chalk Bluffs microflora. Appropriately, Lanny passed away while working at his computer in the office late at night. He had dreams of projects right up until the time of his death. No one knew the extent of his health problems other than his knee replacements. Despite those surgeries and normally bringing up the rear with Joyce on hikes, he thoroughly enjoyed fieldwork. Throughout his professional career, Dr Fisk was a lecturer, teacher, and mentor to many in the geology and paleontology community.

In 1996 Lanny married Tami Wanner. Their children are Daniel (21), Michael (19), and Dessa (16), who all live in the Sacramento area. Lanny's family also includes his sisters, Paula Fardulis of Carlsbad, California, and Susan Brantley of Vestaburg, Michigan. Lanny had valued relationships with many cousins, nieces and nephews, great nieces and great nephews, who tolerated the teasing and practical jokes that came along with his wit. Those of us who were close to him have lost a very good friend.

Norman James Norton

(April 26, 1933 – March 24, 2017)

By Robert Clarke



Norman J. Norton was born April 26, 1933 in Du Quoin, Illinois to James Harlan Norton and Helen Riley Norton of Cutler, Illinois. Graduating from high school in 1950 Norm enrolled in Southern Illinois University, Carbondale, Illinois.

After two years at SIU, in 1952, he joined the United States Air Force. Upon completion of his military service in 1956, Norm returned to SIU and earned his Bachelor of Science degree in 1958. Norm continued his academic career at the University of Minnesota and, under the direction of Dr. John Hall he attained his Masters degree in 1960 and his PhD in 1963. Following graduation Norm took a short assignment with Exxon Oil Company in Houston, Texas and had the opportunity to meet and work with Lew Stover and Bill Elsik.

Norm joined the faculty at Hope College in Holland, Michigan in 1964 as an Assistant Professor, and in 1965 became Chairman of the Department. He attained the rank of Full Professor in a few years. Norm continued his career at Hope College until 1974 when he took an assignment as Chairman of the Department

of Biology at Ball State University in Muncie, Indiana. During the years 1978-1979 he held the post of Acting VP for Academic Affairs, and then from 1979-1981, he was the Acting Dean for the College of Arts and Sciences.

Norm then took the position of Provost and VP for Academic Affairs at Indiana University of Pennsylvania (located in Indiana, Pennsylvania) in 1981 and kept this position until 1983. During his years at Hope College, Ball State University, and Indiana University of Pennsylvania (1969-1983) Norm worked summers as a Consulting Geologist for Gulf Oil Company in Houston, thus improving his skills as a palynologist/biostratigrapher during those years.

In 1983 Norm made the decision to join Gulf Oil E&P Houston on a full-time basis as Coordinator of the Palynology Section. In 1985, Gulf Oil was acquired by Chevron Oil Company and Norm stayed with the "new company" working on projects as a biostratigrapher, exploration geologist and as a stratigraphic services geologist at the Chevron Overseas Petroleum Company in San Ramon, California. In 1990 Norm received the Chevron Overseas Petroleum Company Achievement Award for his continued contributions to the Company.

Norm was transferred to Houston in 1991 as the Supervisor for the Biostratigraphic Section of Chevron USA Houston. In 1993 he was appointed to the position of Acting Division Geologist for Chevron USA, and in 1995 was promoted to Division Geologist with the title of Geological Consultant, a position he held until he retired from Chevron in 1998. Norm and his wife Bettie moved to Kiawah Island, South Carolina. After he retired from Chevron Norm formed a consulting company named Envirostrat and he consulted with a number of major oil companies, on palynology biostratigraphy.

Norm's involvement in the American Association of Stratigraphic Palynologists began in 1968 just months after the Association had been formed in December 1967. In the early

days/years of the Association Norm attended most all of the incoming and outgoing Executive Committee sessions held at the Mid-Year and Annual Meetings as if he was a member of the Board in order to learn more about the workings of the Association. At the 1970 AASP Executive Committee meeting held during October in Toronto, he was chosen to be the Chairman of the Nominating Committee. Norm was also active in other Committees during the early-and mid-1970s including the Constitutional Revision Committee, and the Archives Committee. During the mid 1970s Norm, along with others, was instrumental in working toward the creation of the AASP Foundation and achieving an IRS designation as a “public not-for-profit” organization. Norm was selected as Trustee and Chairman of the AASP Foundation and was so listed in the proposed Foundation By Laws submitted to the IRS in May 1976. The IRS approved the Foundation’s “Advance Ruling Period” in November 1976, and the IRS final approval of the Foundation’s status as a 501(c)(3) “public not-for-profit status was granted in October 1979. Norm’s guidance and counsel were invaluable during this time of forming the AASP Foundation. Norm continued to be the Trustee and Chairman of the AASP Foundation from its inception until November 2015, a period of 39 years of continuous service.

In 1978 Norm was presented with the American Association of Stratigraphic Palynologists Distinguished Service Award for his work with various AASP Committee activities and for

his work to help attain a “not-for-profit” status for the AASP Foundation. Norm was awarded Honorary Membership in 2016 by for his long and dedicated service to the Society.

Norm’s parents, brother Charles, and an infant daughter, Jamie Lynn Norton preceded him in death. Norm is survived by his wife Bettie Greer Norton, of Columbia South Carolina, one son, Matthew J. Norton and his wife Linda of Sullivan’s Island, South Carolina and their two children, Matthew J, and Michelle, and one daughter, Jane Beach and her husband, John Beach of Colombia South Carolina.

John Utting



Photo by Gunn Mangerud. Svalbard 1990.

Sadly John Utting, an esteemed late Paleozoic-Triassic palynologist, passed away in August, 2018, at the age of 78. An obituary will appear in *Palynology* (White et al.).

News from...

Australia

By Vera Korasidis
(on behalf of Jen Cooling and Alex Wheeler)

During October Australian palynology was well represented at the inaugural Australian Geoscience Council Convention. A multidisciplinary Earth Science convention bringing together academia, industry and government to discuss rocks, resource development, new technologies and the boundaries of our science' featuring three days of ten concurrent technical sessions and one day of plenaries. Dr Carmine Wainman presented a talk on his recent PhD 'Recognising base level shifts in the Upper Jurassic Walloon Coal Measures of the Surat Basin, Australia'. Palynology was further represented with the following posters:

1. Using reworked palynomorphs as sediment provenance markers in the Surat Basin, Jennifer Cooling

2. Palynology of a Late Permian Marker Mudstone in the Bowen and Galilee basins: Implications for inter-basinal correlation, Alexander Wheeler

3. Sedimentological and palynological investigations from Mesozoic strata of the Bight and Mentelle Basins, Australia: Preliminary results from IODP Expedition 369, Dr Carmine Wainman.

During November, Australian palynology was also represented at the Victorian Universities Earth and Environmental Science Conference where PhD student Vera Korasidis presented her talk on 'Terrestrial cooling records through the Eocene-Oligocene transition of Australia'.

Kind regards

United States of America

By Ingrid Romero

Palynology from the Midwest

In the middle of an area surrounded by soybean and corn fields, there are many exciting projects in development by Surangi Punyasena and her lab at the University of Illinois. Some of these projects include: alternative methods for the preparation of palynomorphs; the development and use of new microscope techniques; as well as the application of Convolute Neural Networks-machine learning for pollen identification.

This April, her lab published the paper "Nested cell strainers: An alternative method of preparing palynomorphs and charcoal" by Urban et al., in *Review of Paleobotany and Palynology*. This paper proposes to improve the palynological preparations by using stackable sieves, which are called nested cell strainers.

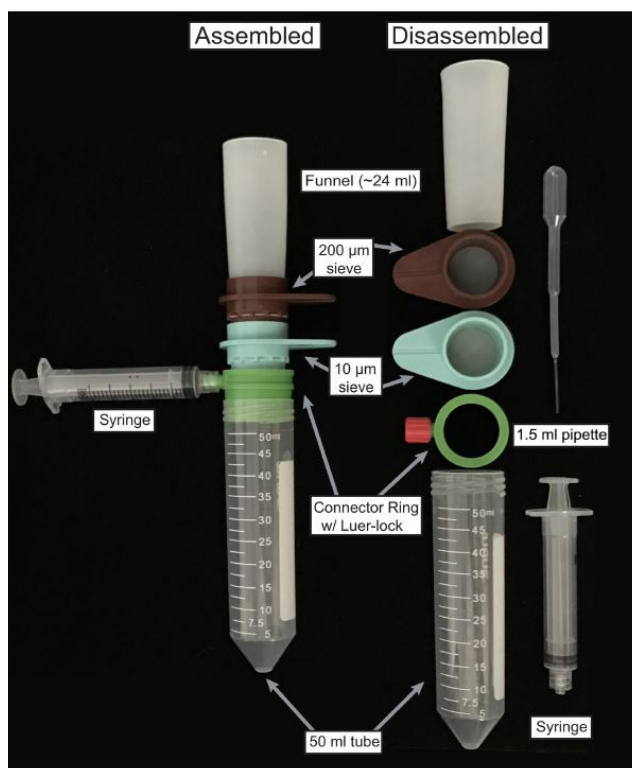


Figure 1. Components for the cell strainers palynological processing assembled and disassembled. Photo taken by Michael Urban.

These sieves fit standard plastic centrifuge tubes of 50ml, and they can be used with special rings that allow the attachment of disposable syringes for suction. These sieves can speed the palynological processing by reducing the number of centrifugation steps, as well as minimizing the need for decanting supernatant. In addition, the palynological samples are mounted in Eukitt, which is a solid mounting media with a refractive index similar to the glass, improving the imaging of palynomorphs on superresolution light microscopes.

The lab has also worked toward the improvement of the resolution of pollen images that can be used to develop Convolute Neural Networks (CNN) models. The main aim of these models is to increase the speed and quality of pollen identification by its automatization. The first approach of these models has been made using pollen rain records from Barro Colorado Island (BCI) by Derek Haselhorst (idigbio report 2017). To use CNN-machine learning models, the process includes the scanning and imaging of the palynological slides using a scanning microscope (Hamamatsu Nanozoomer) and using this raw data to train the CNN models to recognize, identify, and select pollen among other organic debris. As preliminary results of this study, Derek and collaborators have found that the CNN models showed a high accuracy (~90%) of identifying pollen taxa found in the BCI samples. This work also shows that scanning microscopes and CNN-machine learning models applied in palynology will increase the speed and accuracy of identification of fossil palynomorphs, especially in sedimentary environments with high diversity, such as the Neotropics.

These new approaches in palynology developed by Surangi Punyasena's lab will improve quality and timing in the preparation and identification of fossil palynomorphs. It also allows us to compare and corroborate pollen identification across the world, increase count timing, increase the identification of biostrati-

graphic markers, and enrich our understanding on paleoecological communities in time and space.

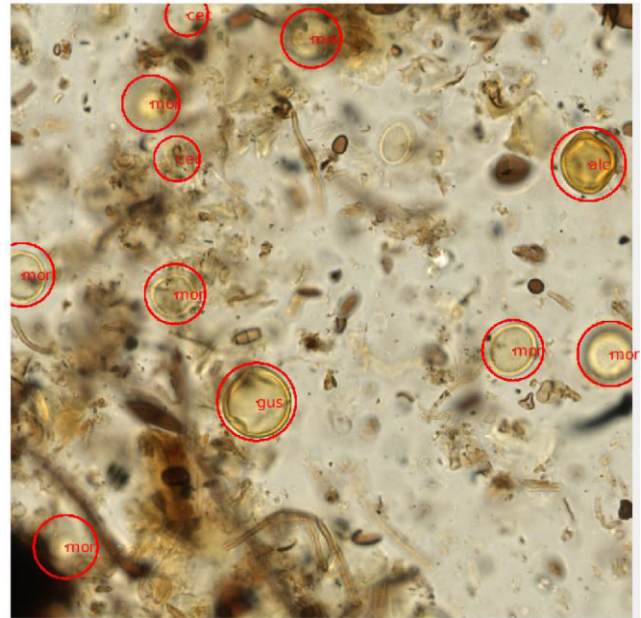
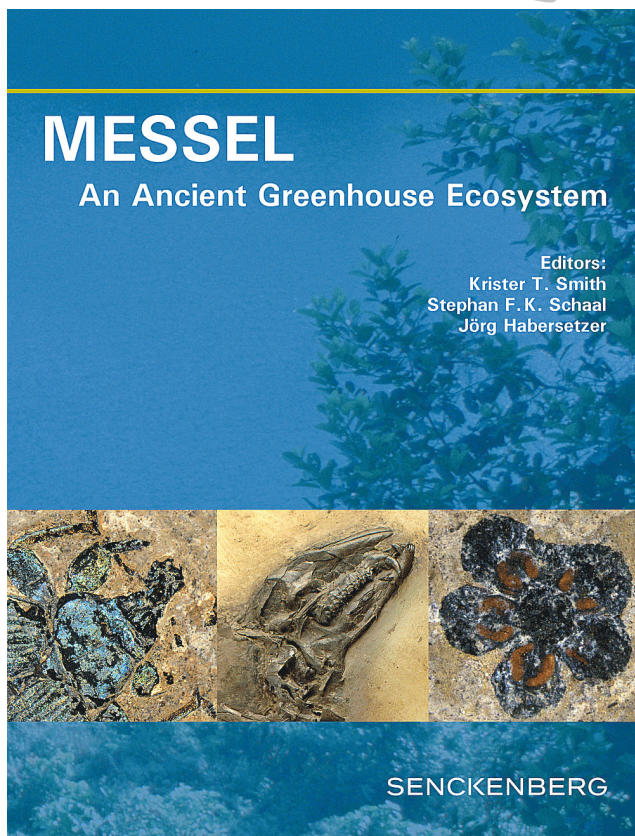


Figure 2. Visual representation of a microscope pollen slide image. Red circles are indicating the pollen grain identified, and their identification is marked using a 3-letter taxonomic naming system. Photo taken by Derek Haselhorst.

References

- Urban M., Romero I., Mayandi S., Punyasena S. 2018. Nested cell strainers: An alternative method of preparing palynomorphs and charcoal. *Review of Paleobotany and Palynology* 253: 101-109.
- Haselhorst D. 2017. Using convolute neural networks to automate tropical pollen counts and identification. *iDiGBio, Research Spotlight: September 2017*. Retrieved from <https://www.idigbio.org/content/research-spotlight-september-2017>

Book Reviews



TECHNICAL INFORMATION

Editors: Krister T. Smith, Stephan F.K. Schaal and Jörg Habersetzer

Title: Messel – An ancient greenhouse ecosystem (also available in German: “Stephan F.K. Schaal, Krister T. Smith, and Jörg Habersetzer: Messel – ein fossils Tropenökosystem”)

Year: 2018

Series: Senckenberg Books

No.: 80

Publisher: Schweizerbart Science Publishers and Senckenberg Nature Research Society

Place: Stuttgart

Pages: 355 p.

ISBN: 978-3-510-61411-0

Price: 54.90 €

Review

By Gilda Lopes

“Messel – An ancient greenhouse ecosystem” by Krister T. Smith, Stephan F.K. Schaal and Jörg Habersetzer (eds.), is a comprehensive popular-scientific book on the “results of the research conducted since the 1970s by biologists and geo-scientists on the unique fossils from the Messel oil shale deposits”. This reference work provides an exceptional perspective on the richness of the different fossil content of this UNESCO World Heritage site, fulfilling its purpose of disseminating the scientific importance of this area to other scientists and general society. The book was produced under the scientific support of the Senckenberg Nature Research Society and includes 13 chapters written by 28 well-established researchers.

The first chapters start with an emphasis on the history of the site, followed by an explanation on the geology of the area, the paleoclimates that persisted during the Eocene, the methodologies used for extraction, preparation and study of the fossils, and the particular physical features that make this location an outstanding fossiliferous area. The succeeding chapters offer information on all the different faunal (vertebrate and invertebrate) and floral fossil groups found in this area since 1975. A brief explanation of each group biology, classification, living habitats, evolution, and distribution through time is made, and an integrated view of the preceding chapters with the description of the Messel ecosystem is included in the last chapter.

More than 390 figures and extraordinarily high-quality photographs and illustrations are included in this volume, revealing the exceptional preservation of its fossils and confirming the outstanding value of this area has one

Meetings Report

of the richest sites in the world to the understanding of the Eocene ecosystem (“Messel counts among the world’s most important fossil sites. Sites of this kind allow deep insights into the evolutionary history of life...”, page 25). The book offers an insight into the current scientific knowledge of this area, is based on an extensive list of scientific publications, which includes the most recent papers published in scientific international journals with high impact factor. References to these publications are made throughout the text, guiding the readers to seek more information if interested. Also, additional information boxes are included to introduce main scientific concepts, allowing a better understanding of the text body.

There are some down points including its length and the scientific language used that in some chapters lacks a more didactic approach, becoming difficult to understand by a fossil enthusiast or a layperson (“The edge areas show an increasing extent of slippage structures (Pirrung 1998) that indicate settling phenomena of the underlying diatreme and the hardening (diagenesis) of the black pelites themselves.”, page 10). Also, it misses an opportunity to explore and promote in more detail all the work that is currently being done in the Hessian State Museum, as well as in the visitor and information center at the Messel Pit.

Despite its few weaknesses, this extensive work is recommended as a high-quality scientific work, important to the understanding of the significant paleontological research which has been done at Messel, and that has greatly contributed to our knowledge of evolutionary history, ancient ecosystems and paleoclimates.

Toward New Challenges: XVII Simposio Argentino de Paleobotánica y Palinología

By Noelia Nuñez Otaño and Jen O’Keefe

(on behalf of Mercedes di Pasquo and Guillermina Fagúndez, President and Vice President of the Organizing Committee)

The 17th Argentine Symposium of Paleobotany and Palynology was held in Paraná, Entre Ríos, Argentina from July 30th through August 5th, 2018. The very vibrant multi-lingual (Spanish, Portuguese, and English) meeting was followed by six days of workshops and short courses. Along with scientific presentations, an exhibit of scientific art, concentrating on palynological and paleobotanical illustrations in homage to Marta Alicia Caccavari, noted actiopalinologist and pollen illustrator, was held.



Photo 1. Mercedes di Pasquo, president of the SAPP organizing committee.

Delegates were encouraged to vote for their favorite work prior to the end of the meeting in each of two categories: photography and illustration. The winner of the photography category was Augustina Yañez, with second place going to Maía del Rosario Rodríguez. The winner of the illustration category was Irene Behrens, with second place going to Ezequiel Farrell.



Photo 2. Guillermina Fagúndez, vice president of the organizing committee.

The Symposium opened on Monday morning, July 30th, with musical stylings of a student saxophone quartet from the Autonomous University of Entre Ríos (UADER). Opening remarks were made by the rector of UADER, Aníbal Sattler, the dean of the College of Science & Technology at UADER, Jorge Noriega, the Director of CICYTTP-CONICET in Diamante, and Mercedes di Pasquo, president of Asociación Latinoamericana de Paleobotánica y Palinología (ALPP). An homage to the many palynologists and paleobotanists who have left us since the last Symposium in 2015 followed, those mourned included Gordon Wood and Thomas Taylor. The induction wrapped up on a much happier note, as Mirta Quattrochio was honored for her long career and many contributions to palynology with a retrospective slide show upon the occasion of her retirement from CONICET; she will continue to teach and mentor students at UNS in Bahía Blanca.

Mirta followed the retrospective with a compelling overview of where palynology has come from and where its challenges lie, entitled: “Complexity and New Paradigms: my personal view of palynology.” The opening luncheon, featuring regional cuisine of Entre Ríos, followed, allowing delegates to meet and mingle.

Oral Presentations on Monday focused on botanical evolution. Of especial interest to palynologists was Damían Fernández’s presentation entitled, “Sporopollenic analysis of the River Turbio Formation (Eocene of Santa Cruz Province) and its Relation with Global Paleoclimatic Changes: Mixed Paleofloral Evolution,” which highlighted that the entire unit is charac-

terized by high levels of floristic diversity and the presence of warm climate forms, some of them found for the first time for South America and Argentina. This session was followed by a session on the study of fossil woods and a paleobotanical poster session.

Tuesday featured theme sessions on the paleobotany and palynology of the Paleozoic in the morning, and the Mesozoic in the afternoon. Talks concentrated on research from Argentina with forays to Bolivia, Peru, Brazil and the United States and addressed a range of fossil groups, including chemical fossils. A high proportion of the talks were from doctoral students and early career researchers, a trend which continued into the poster session. The challenges with orphaned and damaged collections were highlighted in Roberto Iannuzzi’s keynote “Rescate de fósiles – experiencias y recomendaciones.”

Tuesday was perhaps the busiest day of the symposium, as an all-day theme session and workshop on the Characterization of Argentine Honeys was held. This workshop was extremely well attended by melissopalynologists, and a great deal of cross-fertilization took place among melissopalynologists, actuopalynologists, and paleopalynologists, especially during the poster session, where 24 melissopalynology presentations were made!



Photo 3. A brass quartet opened the symposium with regional favorites.

Wednesday began with a symposium on the Paleobotany and Palynology of the Quaternary in the morning. This very diverse session contained talks and posters from across South America, with notes from Europe. Two talks stood out above and beyond all others – an overview of the wonderful online pollen catalog and identification key RCPol (<http://rcpol.org.br/en/homepage/>) by Claudia da Silva and an absolutely incredible study of much-neglected palynomorphs and everyone's favorite fossil ewww...parasite eggs by María Ornela Beltrame.



Photo 4. Parasite eggs are perhaps one of the most overlooked non-pollen palynomorphs. Ornela Beltrame has made them her specialty.

Continuing outstanding efforts to make all palynologists welcome and the theme of exploring new challenges in palynology, Wednesday afternoon featured a session on Palynology applied to the conservation of and sustainable use of honey from stingless bees in the Americas. This emerging area of palynological research has far-ranging impacts on pollinator protection plans and sustainable development, as shown by Favio Vossler. Claudia Silva highlighted the need to include paleopalynological studies into our design of pollinator-friendly ecosystem reconstructions in her keynote "Palinoecología y conservación de abejas."

Wednesday was rounded out by the conference dinner with live music, dancing, and karaoke!

Thursday was a day of Paleogene-Neogene paleobotany and palynology then all things non-pollen-palynomorph: fungi, phytoliths, diatoms, starch granules in paleoenvironmental and archaeological studies. The oral sessions wrapped up with the AASP-sponsored keynote "Mycopalynology and Modern Processing Techniques" with Jen O'Keefe. Posters included aerobiological studies of fungal spores and a showcase of collaborations between modern mycologists and paleopalynologists. The poster session also included the most visually stunning poster of the meeting – "Diatomeas en terrazas fluviales Holocenas del Sudoeste de Entre Ríos, Argentina" by Egly Pérez Pincheira.



Photo 5. The clear winner of karyoke at the conference dinner was Paulo Alves de Souza – what a voice!

Friday, was all about new challenges: forensic palynology, and new methods in Paleobotany and Palynology. The final keynote of the conference, "Estabilidad de la vegetacion durante el tardiglaciario y el Holoceno en el sur de Sudamérica" by Sonia Fontana examined vegeta-

tion stability from the late Pleistocene to early Holocene and highlighted the complexity of the variables driving ecosystem dynamics.

The symposium ended on Friday afternoon with the general meeting of ALPP, at which many awards were made and the location for the next SAPP was determined. Among the awardees, best student oral presentation in palynology went to doctoral student Marcela Quetglas. The best oral presentation by an early career researcher in palynology went to Fabio Flores. The overall best poster presentation in palynology went to Egly Pérez Pincheira and Gonzalo Torres. The XVIII SAPP will take place in 2021 in San Salvador de Jujuy, Argentina and be hosted by the Palynology Laboratory of the Faculty of Agricultural Sciences and the Institute of Andean Ecoregions (INECOA) UNJuCONICET, led by Liliana Lupo. The outstanding presentation by Ana Carina Sánchez, Gonzalo Román Torres, and Fabio Fernando Flores had the entire delegation excited for our next meeting in northern Argentina!



Photo 6. Mirta Quattrochio got us all up and dancing, starting with Marcelo Martinez.

Many delegates stayed on beyond the symposium to participate in the six short courses: Palynofacies analyses: the utility of paleoenvironmental reconstruction and determination of hydrocarbon potential; Forensic Palynology; Workshop on Pollen Catalog Networks; Analysis of paleoecological data in R; The desktop electronic microscope in paleobotany and palynology; and Introduction to the use of cytometry on plants.



Photo 7. Delegates pose in front of the convention center in Paraná, Argentina.

The courses took place in the six-day period following the conference and provided a unique opportunity for intensive skills training without additional travel.

Portions of the symposium were live-tweeted under the hashtag #SAPP2018. Meeting photos and impressions are archived under the Facebook group XVII Simposio Argentino de Paleobotánica y Palinología. This, as well as individual snapchat, Instagram, and very popular WhatsApp Group feeds has allowed an unprecedented presence of South American Palynology and Paleobotany on social media, allowing them to reach hundreds who could not attend.

Archives of important meeting events and a full synopsis of the meeting's successes can be found at <http://alpaleobotanicapalinologia.blogspot.com/2018/09/>.

2018 Annual Meeting of the Geological Society of America

By Jen O'Keefe

Another busy meeting of the Geological Society of America, of which AASP – The Palynological Society is an Associated Society, has come and gone. Ingrid Romero spear-headed new swag (pens and bottle openers) for the booth which proved extremely popular. Thanks, Ingrid!

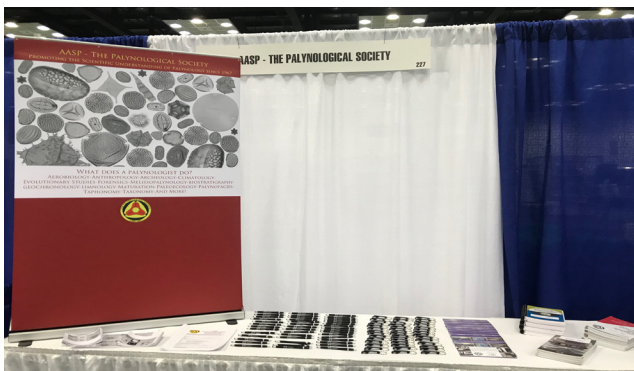


Photo 1. The booth.

There was brisk interest in the palynomorph necklaces, and the AASP foundation books provided by Thomas Demchuk all sold well.

Considerable interest was expressed in the graduate program at CENEX and the upcoming course at Missouri S&T, both of which were advertised at the booth. The booth was manned primarily by our GSA Liaison, Francisca Oboh-Ikuenobe, with help from Ingrid Romero, and Jen O'Keefe.

AASP co-sponsored three topical sessions at the meeting, which contained 23 presentations that involved palynology among them:

- T110: Lakes Through Space and Time, which had two half-days of oral presentations and a poster session;
- T121: Insights from Microfossils, Palynology, and Their Modern Analogs: From Traditional to Emerging Techniques, which had an oral session and a poster session; and
- T126. Earth and Life Co-Evolution in the Early to Middle Neoproterozoic (1000 to ca. 635 Ma), which had an oral session.

A near-equal number of palynology talks were scattered throughout the meeting, including the following:

- BERCOVICI, Antoine, et al.: PALYNOLOGY AND PALEOENVIRONMENT OF THE TERRESTRIAL PERMIAN-TRIASSIC TRANSITION IN WESTERN GUIZHOU AND EASTERN YUNNAN, SOUTH CHINA.
- GULICK, Sean, et al.: INSIGHTS INTO IMPACT PROCESSES AND EXTINCTION MECHANISMS FROM IODP-ICDP CHICXULUB CRATER DRILLING (Invited Presentation).
- DECHESNE, Marieke, et. al.: TECTONIC AND CLIMATIC SIGNALS: AN INTEGRATED STRATIGRAPHIC FRAMEWORK FOR THE PALEOCENE TO EOCENE SYNOROGENIC STRATA OF THE COALMONT AND

MIDDLE PARK FORMATIONS, NORTH PARK – MIDDLE PARK, COLORADO.

- MAYS, Chris, et al.: EXTINCTION, EVOLUTION AND RECOVERY OF THE GONDWANAN FLORA THROUGH THE PERMIAN-TRIASSIC BIOTIC CRISIS IN SOUTHERN HIGH PALAEO LATITUDES, AUSTRALIA.
- BOMER, Edwin, et. al.: AN INTEGRATED APPROACH FOR CONSTRAINING DEPOSITIONAL ZONES IN A TIDE-INFLUENCED RIVER: GORAI RIVER, SOUTHWEST BANGLADESH.
- SPENCER, Marissa, et al.: PALEOENVIRONMENT OF MESOZOIC SEDIMENTS REVEALED BY PALYNOLOGICAL ANALYSIS: IMPLICATION FOR HYDROCARBON POTENTIAL OF THE ORANGE BASIN.
- CAMELO, Jonathan M., et al.: CAVE SEDIMENT ANALYSIS FROM RUSSELL AND MONTAGUE CAVES IN NORTHEASTERN ALABAMA.
- OLATUNJI, Ola-Buraimo Abdulrazaq: PALYNOZONATION, CHRONOSTRATIGRAPHY AND PALEOENVIRONMENT OF DEPOSITION OF THE ALBIAN TO PLIOCENE SEDIMENTS OF NZAM-1 WELL, ANAMBRA BASIN, SOUTHEASTERN NIGERIA.
- WEISLOGEL, Amy, et al.: ASSESSING THE CONTROLS ON STRATIGRAPHIC PATTERNS IN THE SYNOROGENIC CLASTIC WEDGE OF THE CENTRAL ALLEGHANY OROGEN (Invited Presentation).
- NEITZKE ADAMO, Lauren, et al.: FROZEN IN TIME: A HANDS-ON ICE CORE, POLLEN, AND CLIMATE CHANGE LESSON PLAN FOR MIDDLE SCHOOL, HIGH SCHOOL, AND INTRODUCTORY COLLEGE CLASSES.
- CURRY, Brandon, et al.: OSL CONFIRMATION OF WIGGLE-MATCHED U-SERIES-TUNED $\delta^{13}\text{C}$ SPELEOTHEM RECORD

WITH POLLEN ASSEMBLAGES OF THE LAST INTERGLACIAL TO GLACIAL TRANSITION, CENTRAL ILLINOIS, USA.

- LABANDEIRA, Conrad, et al.: GYMNOSPERMS, ANGIOSPERMS AND INSECT POLLINATORS TRANSITING THE ALBIAN-APTIAN GAP.
- DRAZAN, Jacqueline, et al.: MASTODONS (MAMMUT AMERICANUM) AND THE LATE-GLACIAL VEGETATION OF THE EASTERN USA.
- LOOY, Cindy, et al.: IMPLICATIONS OF OZONE SHIELD FAILURE DURING THE END-PERMIAN BIOTIC CRISIS (Invited Presentation).
- VAJDA, Vivi, et al.: CONSEQUENCES OF THE SUDDEN COLLAPSE OF FORESTS ACROSS THE END-PERMIAN EVENT (252.3 MYA) – EVIDENCE FROM THE SYDNEY BASIN AUSTRALIA.
- BAGHAI-RIDING, Nina, et al.: DISPERSED PALYNOMORPH AND CUTICLE ASSEMBLAGES FROM THE LATE JURASSIC MORRISON FORMATION, SOUTHEASTERN UTAH: FLORISTIC AND PALEOCLIMATE IMPLICATIONS.
- VAJDA, Vivi, et al.: BIOTIC RECOVERY FOLLOWING THE END-CRETACEOUS ASTEROID IMPACT RECORDED FROM GORGONILLA ISLAND, COLOMBIA (Invited Presentation).
- GORING, Simon: THE NEOTOMA PALEOECOLOGY DATABASE: BUILDING COMMUNITIES AROUND PALEOECOLOGICAL DATA.
- BAXSTROM, Kelli: APPALACHIAN ECOSYSTEM RESPONSE TO LATE PLEISTOCENE CLIMATE CHANGE.
- FASTOVSKY, David, et al.: DEPOSITIONAL SETTING OF THE DINOSAUR-BEARING EL DISECADO MBR., EL GALLO FM., LATE

CRETACEOUS, BAJA CALIFORNIA, MEXICO: EPISODIC CLASTIC SEDIMENTATION IN THE DOTT TRADITION.

- SIMPSON, Andrew: DOES SEED DISPERSAL AFFECT RATE OF SPREAD DURING PLEISTOCENE CLIMATE CHANGE?
- EBLE, Cortland: PALYNOLOGICAL RECONNAISSANCE OF LOWER AND MIDDLE PENNSYLVANIAN STRATA IN THE EASTERN INTERIOR (ILLINOIS) BASIN, USA.
- MIHINDUKULASOORIYA, Lorita, et al.: MONITORING THE WATER QUALITY AND THE TEMPORAL VARIABILITY OF PHYTOPLANKTON USING REFLECTANCE SPECTROSCOPY TO UNDERSTAND HARMFUL ALGAL BLOOMS IN THE OLD WOMAN CREEK NATIONAL ESTUARINE RESERVE, OHIO.

A running joke is that palynologists will take over the world through quiet infiltration of every discipline, and we just might! Abstracts of all presentations can be found at: <https://gsa.confex.com/gsa/2018AM/webprogram/>.

Of the 56 palynology presentations, many were from students. Students from the midwestern schools, Missouri S&T, University of Illinois Urbana-Champaign, Wright State University, and Morehead State University were especially well-represented. Many of the student presentations were entered in the GSA Geobiology and Geomicrobiology Division (GBGM) best student oral competition and best student poster competitions.

Winners were announced in late November. We're pleased to share that one of the best student poster awards went to a palynology student! Maggie Stephenson, a sophomore

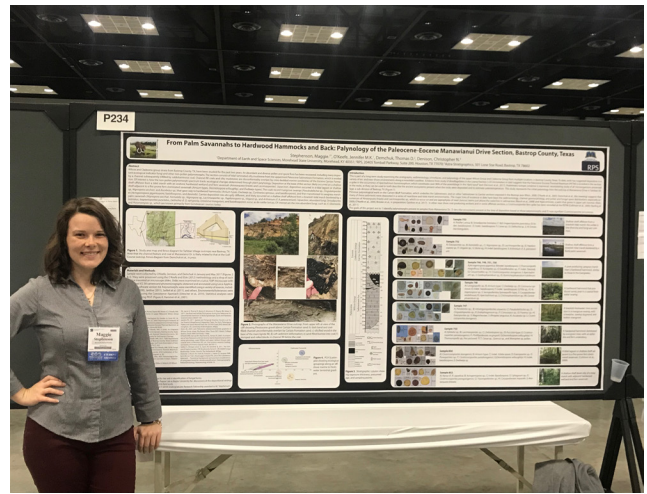


Photo 2. Maggie Stephenson with her award-winning poster.

geology major at Morehead State University, for her presentation entitled "From Palm Savannahs to Hardwood Hammocks and Back: Palynology of the Paleocene-Eocene Manawianui Drive Section, Bastrop County, Texas." This work, with co-authors Thomas Demchuk, Chris Denison, and Jen O'Keefe, highlighted eight assemblages preserved in sediments that span the Paleocene-Eocene boundary. Interpretation of the assemblages was greatly improved through incorporation of fungal palynomorphs.

Several students also participated in the Paleontological Society Poster Prize. Damián Cárdenas, a PhD student at Missouri University of Science and Technology, won the second-place prize for his poster entitled "Early to middle Miocene marine palynology of the Colombian Caribbean margin: biostratigraphic and paleoceanographic implications". His co-authors were Francisca Oboh-Ikuenobe and Carlos Jaramillo.

Call to Serve Newsletter open positions



Not sure that you want to run for office but want to help the society? Become a newsletter correspondent, either formally or informally! We welcome student and professional news, book reviews, reports on meetings, workshops, etc. Submissions are due on November 15, February 15, May 15, and August 15, annually.

Current vacancies include:

- BOOK REVIEW EDITOR
- INDIA CORRESPONDENT
- ASIA CORRESPONDENT
- SOUTH AFRICA CORRESPONDENT

The AASP - The Palynological Society Newsletter is a publication with an ISSN number (ISSN 0732-6041), which **helps your CV!**

Our newsletter is only as good as the news we receive.
Please stay in touch!

Gilda Lopes
Newsletter Editor

Consider Helping our Mission

AASP FOUNDATION CENTURY CLUB



What?

The Century Club of the American Association of Stratigraphic Palynologists Foundation is an organization founded by the Trustees of the Foundation in order to provide persons with the opportunity to support activities of the AASP Foundation.

Why?

1. To develop an established level of giving that will continue to provide a solid financial base for the Foundation.
2. To provide unrestricted funds to support the various publishing activities of the Foundation.
3. To provide a meaningful organization and method of recognition of dedicated "friends" of the AASP Foundation.

How?

Your tax-deductible contribution of \$100 or more to the AASP Foundation entitles you to belong to the Century Club. The 2016 "membership" drive is on now. Your contribution may be made by personal check or by a pledge which is **payable on or before December 31, 2018**.

Join!

To join the Century Club, simply complete the attached Contribution/Pledge Form and mail to the address listed below.

The AASP Foundation is a 501 (c)(3) not-for-profit, public organization registered in the United States. This means that contributions to the AASP Foundation are fully deductible on your U.S. Federal Income Tax return. Also, many employers have a matching gift program whereby they match your personal gift to not-for-profit organizations. It is well worth the effort to explore this possibility concerning your gift to the AASP Foundation.

2018 AASP Foundation Century Club Contribution Form

Mail to: Robert T. Clarke, Treas.
AASP Foundation
3011 Friendswood Dr.
Arlington, TX 76013-2033

Name: _____

Address: _____

Contribution Enclosed: \$_____ I wish to pledge: \$_____

Upcoming AASP-TPS Meetings



2019

52nd Annual Meeting of the AASP - The Palynological Society

Ghent, Belgium

Organizers: Stephen Louwye & Thijs Vanderbrocke

2020

53rd Annual Meeting of the AASP - The Palynological Society

Baton Rouge, Louisiana, USA

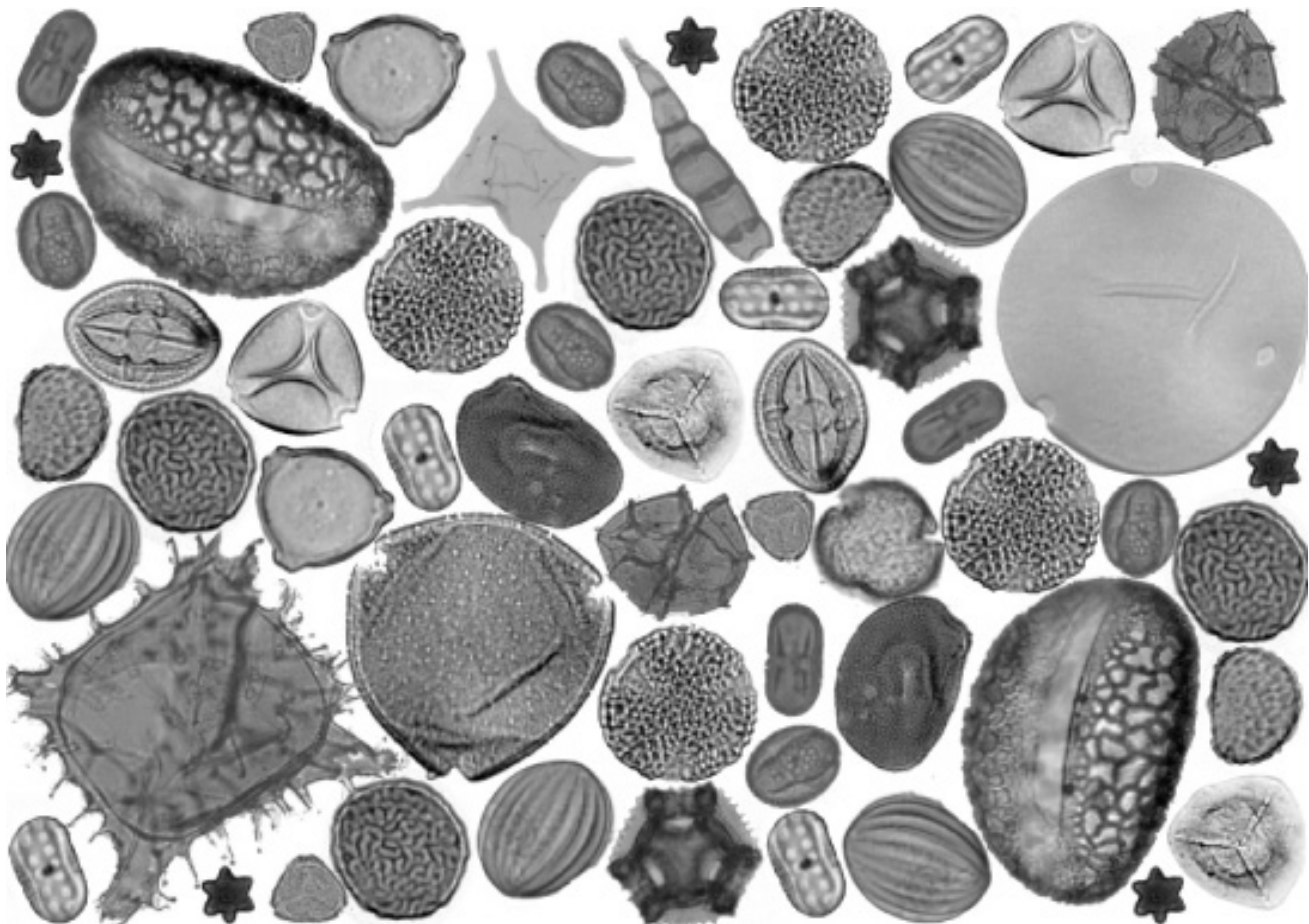
Organizer: Sophie Warny, Kam-Biu Liu & Sibel Bargu

2021

54th Annual Meeting of the AASP - The Palynological Society

Manizales, Colombia

Organizers: Ingrid Romero, Angelo Plata & Andres Pardo



GHENT, BELGIUM

Sunday June 30th to Friday July 5th 2019

SECOND CIRCULAR

The 52nd annual meeting of the AASP – The Palynological Society will be held at Ghent University in Belgium between June 30th to July 5th, 2018. The meeting will be convened by Stephen Louwye & Thijs Vandenbroucke of the Dept. of Geology of Ghent University. We are looking forward to welcoming you to 'Het Pand', the conference center of Ghent University.



CONFERENCE PLAN

- Saturday 29th June 2019:** *Arrival in Ghent for field trip attendees*
- Sunday 30th June 2019:** *Arrival in Ghent/registration/pre-meeting field trip to the Paleozoic of southern Belgium/outgoing Board of Directors meeting at Het Pand*
- Monday 1st July 2019:** *Day 1 of technical sessions/icebreaker at Het Pand*
- Tuesday 2nd July 2019:** *Day 2 of technical sessions/conference dinner*
- Wednesday 3rd July 2019:** *Day 3 of technical sessions/incoming Board of Directors meeting at "Het Pand"/ Business Luncheon*
- Thursday 4th July 2019:** *Start of the 2-day post-meeting field trip to the Cretaceous and Jurassic of northern France.*

The program details, prices for registration, field trips, conference dinner etc. are currently being finalized. Please do not hesitate to contact us should you like to convene a topical session, organize a workshop, or are keen to sponsor...

A dedicated section of the AASP website with all relevant details and registration options for the Ghent meeting will be opened in January 2019. *The opening of the webpage will be broadly advertised.*

Meanwhile, you can email stephen.louwye@ugent.be or thijs.vandenbroucke@ugent.be for specific information.



The venue 'Het Pand' is conveniently located in the very center of the historic city of Ghent. It is a historical building, a former abbey that was renovated into a conference center with all up-to-date facilities. A wide range of hotels is located in the vicinity of 'Het Pand', ranging from budget-friendly hostels to luxury hotels. Ghent is easily accessible by train. There are high-speed trains from London, Paris, and Amsterdam to Brussels Midi railway station and direct trains to Ghent from Brussels Airport (50 min) and Brussel Midi railway station (30 min). All details will be provided in due course.

Stephen Louwye – stephen.louwye@ugent.be

Thijs Vandenbroucke – thijs.vandenbroucke@ugent.be



Other Meetings and
Workshops of Interest

We are pleased to announce our 2019 BSRG palynology workshop led by Dr. Adam McArthur and Dr. Alena Ebinghaus from the universities of Leeds and Aberdeen and Dr. Manuel Vieira from Shell. This two day workshop is aimed at postgraduate students and early career geoscientists interested in gaining an introductory overview into palynology and its wide-reaching applications. This trip will also include a core workshop based on sediments from an impact crater lake fill sequence and a team exercise showcasing the power of integrating palynological data into environmental models, particularly applicable to hydrocarbon exploration.

ITINERARY:

Day 1 (17.02) – Arrive in Aberdeen, introductions to the trip and other participants.

Day 2 (18.02) – An introduction to palynology, sampling and analysis, including a core workshop, trip to the sample preparation laboratories and some hands-on microscope analysis.

Day 3 (19.02) – Applications of palynology, comprising a team exercise designed by Shell, focused on the integration of palynological information with other data types. The workshop will finish at 1pm to allow for onward travel.

LOGISTICS:

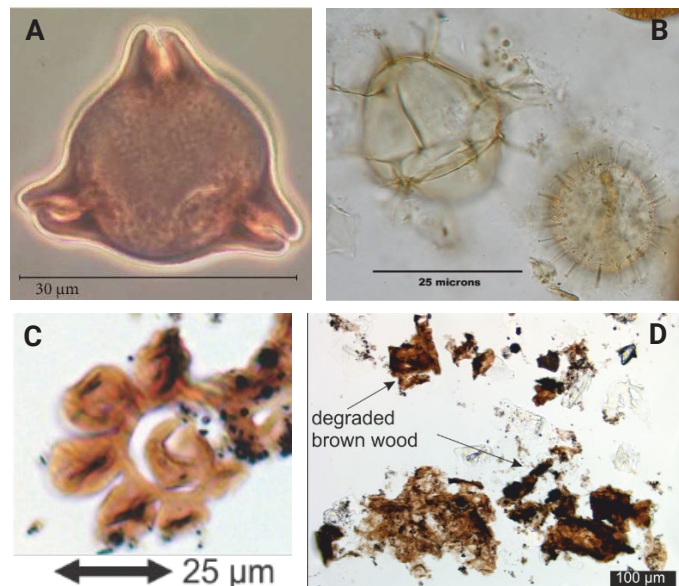
Accommodation – Hillhead Student Village, Don Street, Aberdeen, AB24 1WU

Transport – We will walk from our accommodation to the University facilities.

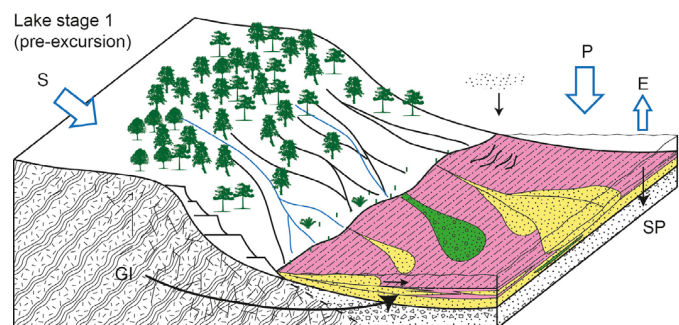
Getting there – Busses run regularly between Aberdeen rail station and the accommodation. Busses also link Aberdeen Airport to Aberdeen City Centre.

Cost – £85 for PhD students and post-docs and £115 for young professionals from industry. This includes accommodation, breakfast, lunch and all workshop materials.

To book your place or for more information please contact Daniel Tek at: ee11dt@leeds.ac.uk



A) *Nudopollis endangulatus* pollen grain from the impact crater. B) Marine dinoflagellate cysts. C) Foraminifera test lining. D) Particulate organic matter from a deep-marine channel system.



Reconstructed depositional environment of impact crater lake fill from integration of palynology and sedimentology data (Ebinghaus et al., 2017)



The **International Meeting on Paleoclimate: change and adaptation**, to be held in Coimbra, Portugal, from June 18 to 19, 2019, provides a forum for young and senior scientists to present their work and discuss their ideas with colleagues in all disciplines of the Earth, space, human and social sciences. Science-based knowledge is crucial to face current challenges, which are focus for research within the UNESCO chair on Geoparks and the UNESCO chair on Humanities and Cultural Integrated Landscape Management, both partners in this international meeting.

Our goal is to stimulate an observational attitude and to promote an open discussion on paleoclimatic signals in order to improve our look at the present and to ground future perspectives.

Research topics

- T1 - Paleoclimates in the Solar System: external forcing and divergent evolutions
- T2 - Climate changes in geological time: lessons to learn
- T3 - Climate memory in the geological record
- T4 - Climate changes and human adaptations throughout the Quaternary
- T5 - Climatic events and human-environment interactions in the Holocene

Abstracts

Researchers are invited to provide a short abstract at the e-mail paleoclimate2019@gmail.com from now until **19 March, 2019** (follow the template available at the link below). Author(s) may also submit a larger manuscript, along with short abstract, using the link provided by the meeting (see "Call for Manuscript"). All accepted manuscripts will be published in a special volume before the meeting. Every abstract/manuscript should present unpublished work.

Abstracts accepted submissions will be announced until **19th April, 2019**.

Registration

General information

- Registration for the *International meeting on PALEOCLIMATE: CHANGES AND ADAPTATION* is secured via payment of the appropriate registration fee.
- There is no waiving of registration fees.
- The registration must be done by completing the form accessible through the link below:

<https://paleoclimate2019.wixsite.com/paleoclimate2019/registration>

Registration fees

Early Bird Rates		Regular Rates	
Price before 30 th April			
Student	€ 30.00	Student	€ 50.00
Non-student	€ 150.00	Non-students	€ 200.00
Fieldtrip	€ 30.00	Fieldtrip	€ 80.00

Website: <https://paleoclimate2019.wixsite.com/paleoclimate2019>
 E-mail: paleoclimate2019@gmail.com
 Phone: (+351) 239 860 511

11TH NORTH AMERICAN PALEONTOLOGICAL CONVENTION



JUNE 23 - 27, 2019 RIVERSIDE, CALIFORNIA

*Welcome to the 11th North American Paleontological Convention (NAPC),
to be held at the University of California, Riverside, 23rd-27th June 2019.
Celebrating 50 years of NAPC!*

INFORMATION AND CALL FOR SYMPOSIUM PROPOSALS

NAPC is an international conference that brings together all branches of paleontology and fields related to the history of life: vertebrate, invertebrate, paleobotany, micropaleontology, paleo-related organic and inorganic geochemistry, paleoecology, paleoclimatology, and astrobiology.

Held every 4-5 years, the meeting attracts professional scientists, graduate and undergraduate students, amateur paleontologists, and interested members of the public. Its purpose is to exchange research findings, define future directions, and be a forum for extended and relaxed interactions between professionals and early career scientists, most particularly graduate and undergraduate students. NAPC meetings are generally less formal than annual association meetings and allow time for more extended and relaxed interactions.

The meeting comprises participant-suggested symposia and topical sessions – please consider proposing a symposium for NAPC2019! Submit your suggestion to the organizers by 30th September 2018: Symposium title, brief synopsis of symposium, names of organizers, full or half day, and any plans for invited speakers to NAPC2019@ucr.edu.



Dates: Sunday 23rd to Thursday 27th June 2019, with symposia running the 23rd to the 24th and the 26th to the 27th. On Tuesday 25th there will be a mid-meeting break, with a variety of scheduled workshops and field trips. Other field trips will run both pre-and post-conference.

Venue: One of the ten UC campuses, UCR is home to nearly 25,000 students and has a long history of research strength in paleontology and allied fields. The meeting will take place in the new University Hub, which contains an array of meeting rooms and spaces of various sizes that are appropriate for virtually all activities planned, ranging from plenary sessions to smaller symposia and group meetings, to exhibits and posters. In addition, most participants will be housed in UCR's new Glenmor Residence Hall; dining and recreational facilities will also be available. Other accommodation options are available nearby off campus.

Communications: Updates on workshop, field trip, and symposia proposal information available on our website: www.napc2019.ucr.edu
Email re: the meeting may be addressed to: NAPC2019@ucr.edu
Follow us on Facebook (NAPC2019); Look for us on Instagram

Field Trips: A variety of field trips will be offered in association with the meeting, with several additional multi-day trips to be announced shortly:

- Extinction events and biodiversification in the Cambro-Ordovician of the eastern Basin and Range (3-5 days)
- Barstovian Biostratigraphy: Barstow and Cajon Valley (1 day)
- Stratigraphy and Paleontology of the Palos Verdes Peninsula (1 day - mid meeting)
- LeBrea Tarpits and the Alf Museum (1 day - mid meeting)
- Low tide visit to Crystal Cove State Park, Laguna Beach, and Newport Pleistocene terrace (1 day - mid meeting)
- Late Oligocene to Late Early Miocene Molluscan and Mammalian Biostratigraphy of Sespe, Vaqueros, and Lower Topanga Formations at Calabasas and Saddle Peaks, Santa Monica Mountains National Recreation Area, Los Angeles County, California (1 day)
- Ediacaran-Cambrian of California and Nevada



Confirmed Mid-meeting Workshops:

- *Numerical Biochronology: Sequencing Large Numbers of Paleobiologic First- and Last- Appearance Events:* Prof. Peter Sadler, University of California Riverside.
- *Timetree methods for beginners:* Prof. Mark Springer, University of California Riverside
- *A hands-on introduction to the Paleobiology Database:* Matt Clapham, UC Santa Cruz
- *Talk to your elected officials! A workshop on communication and public policy for paleontologists:* Sandy Carlson, UC Davis

Additional Programs: There will be spouse, family, grad student, and post-doc specific activities.

Local Museums: Southern California is rich in museums with substantial research collections in paleontology. NAPC will offer various opportunities to visit these institutions. Those wishing to visit collections for research are encouraged to contact relevant staff, understanding that opportunities may be limited by demand.

Current NAPC 2019 Sponsors: The College of Natural and Agricultural Sciences; The EDGE Institute; The Center for Ideas and Society (UCR); The Natural History Museum, Los Angeles



NAPC 2019 Organizing Committee Members: Nigel Hughes, Mary Droser, Nicole Bonuso, David Bottjer, Doug Eernise, Robert Gaines, Austin Hendy, David Jacobs, Jess Miller-Camp, Richard Norris, Kaustav Roy, Peter Sadler, Mark Springer, Xiaoming Wang, Michael Vendrasco



Abstract Submission Deadline - One Month to Go!

We'd like to remind authors that the deadline to submit an abstract for the 20th INQUA Congress is on 9th January 2019, just one month away.

Please [click here](#) for details on how to complete your submission.

Super Early Fee Registration Deadline - 16th January 2019

We are pleased to announce that registration for the 20th INQUA Congress is now open! Register now to avail of the Super Early Fee.

Please click on the button below to register for the congress.

[Super Early Fee Deadline: January 16th 2019](#)

The Gibson - Headquarter Hotel



We are pleased to announce The Gibson as the Congress Headquarter hotel for 2019.

The Gibson Hotel is ideally situated in Dublin just 15 minutes direct from Dublin Airport, at the end of The Port Tunnel. With the LUAS stopping right on the doorstep and the Aircoach stopping directly outside the hotel, The Gibson is not only easily accessible but is one of the closest hotels to The Convention Centre Dublin (The CCD).

Located in the heart of Dublin City, The Gibson is surrounded by an array of bars, restaurants and local amenities. The hotel has stunning views of Dublin Port and the City from the third floor bar and restaurant, making it the ideal spot to relax and unwind after a day at the congress.

Bookings for The Gibson Hotel may be done through the online registration platform.

[Accommodation](#), [social events](#), [fieldtrips](#) and [leisure tours](#) are available to book during the online registration process. We recommend delegates review all options before starting the registration form.

Visit the INQUA 2019 website for the most up-to-date information on the 2019 congress.

20th INQUA Congress 2019

REGISTRATION FEES

Registration Fee	Super Early Fee Deadline 16th January	Early Fee Deadline 27th March	Late Fee After 27th March
Full Delegate	€495	€545	€595
Student Delegate	€395	€445	€495
Full Delegate Least Developed Country	€395	€445	€495
Student Delegate Least Developed Country	€295	€345	€395

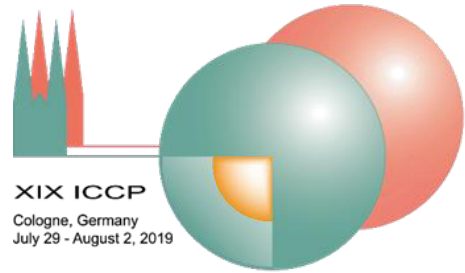
Ensure that you follow us on [Twitter](#) and [Facebook](#) to keep updated on the Congress.
We look forward to welcoming you to Dublin next year.

20th INQUA Congress | 25 - 31 July 2019 | Dublin, Ireland
c/o Keynote PCO, Suite 26, [63 Carysfort Avenue, Blackrock, Co. Dublin, Ireland](#)
Tel: + 353 1 400 3626 Email: registration@inqua2019.org





FIRST CIRCULAR



19TH INTERNATIONAL CONGRESS ON THE CARBONIFEROUS AND PERMIAN

(XIX ICCP 2019)

Invitation

With great pleasure we invite you to attend the 19th International Congress on the Carboniferous and Permian, to be held at the University of Cologne, Cologne, Germany, July, 29th–August, 2nd, 2019. It is our special privilege, to host the ICCP again in Central Europe, following the successful meetings in Cracow 1995 and Utrecht 2003, and forty-eight years after the meeting in Krefeld 1971, hitherto the only “Congres International du Stratigraphie et Géologie du Carbonifère” held in Germany.

The widened spectrum of the congress and major advances made in almost 50 years are a unique opportunity to demonstrate the scientific progress in Germany and adjacent countries of Central Europe, to put these into a global frame enabled by the presentations of established researchers and young scientists and students from all over the world, and to evaluate the results on various fieldtrips in classical and new localities. The Carboniferous and Permian of Central Europe display a multitude of facies, which might suit everybody's interest. In the Mississippian, facies range from carbonate platform environments in Belgium and westernmost Germany to the classical basinal Kulm successions in the Rhenish Mountains and beyond, also seen during the proposed field trip to the Moravo-Silesian Zone (Czech Republic). Pennsylvanian successions contain in part coal-bearing paralic and intramontane succession. The latter continue throughout most of the Permian (“Rotliegend”), and finally are topped by the carbonate and salt deposits of the uppermost Permian “Zechstein” sea, both constituting the classical Northwest-Central European Permian. Finally, an excellent glimpse of the Northwestern margin of the Palaeotethys will be provided by a field trip to the Carnic Alps and Karavanke in the border triangle of Austria, Italy and Slovenia. New data concern stage and substage boundaries, among those on the Devonian-Carboniferous, Viséan-Serpukhovian, and Permian-Triassic boundaries, sequence stratigraphic interpretations, refined biostratigraphic data and non-marine-marine correlations, refined facies interpretations, and spectacular Pennsylvanian-Permian fossils sites. Last but not least, the future economic potential of Carboniferous deposits after ending of coal mining in Germany and adjacent countries is of major interest and new models for the tectonic assemblage of the Variscides “in the heart of Pangaea” emerged in recent years.

We would appreciate to welcome all of you in Cologne. Do not miss this unique forum on the Carboniferous and Permian, meet old and new friends to discuss latest results, and contribute to cutting-edge research of our favourite time slice. We will do our best to organize a splendid meeting!

General sponsors

German Stratigraphic Commission
German Subcommission on Carboniferous Stratigraphy
German Subcommission on Permian and Triassic Stratigraphy
The International Subcommission on Carboniferous Stratigraphy
The International Subcommission on Permian Stratigraphy

Scientific committee and areas of specialization

Michael Amler (Köln), Carboniferous marine invertebrates.
Markus Aretz (Toulouse), Carboniferous and Permian carbonate environments and reefs.
Ondřej Bábek (Olomouc), Co-leader of proposed field trip to the Mississippian of Moravia; multiproxy stratigraphy, sequence stratigraphy and climate-eustacy interactions in the Carboniferous
Julien Denayer (Liège), Leader of proposed field trip to the Mississippian of Belgium; Carboniferous stratigraphy and marine macrobiota.
Holger Forke (Berlin), Leader of proposed field trip to the Pennsylvanian and Permian of the Carnic Alps and Karavanke Mts.; Pennsylvanian and Permian fusulines, stratigraphy and regional geology. *Annette Götz* (Portsmouth), Permo-Carboniferous of Gondwana and its conventional and unconventional energy resources.
Hans-Georg Herbig (Köln), Carboniferous stratigraphy and facies; Congress Chair.
Jiří Kalvoda (Brno), Co-leader of proposed field trip to the Mississippian of Moravia; Carboniferous stratigraphy and marine microbiota.
Hans Kerp (Münster), Permo-Carboniferous palaeobotany.
Tomas Kumpán (Brno), Leader of proposed field trip to the Mississippian of Moravia; multiproxy stratigraphy of Devonian and Carboniferous carbonate successions
Svetlana Nikolaeva (Moscow-London), Vice-chair of the International Subcommission on Carboniferous Stratigraphy; Carboniferous stratigraphy and marine macrobiota.
Matevž Novak (Ljubljana), Leader of proposed field trip to the Pennsylvanian and Permian of the Carnic Alps/Karavanke Mts.; Pennsylvanian and Permian palaeontology, stratigraphy and regional geology.
Edouard Poty (Liège), Co-leader of proposed field trip to the Mississippian of Belgium; Carboniferous marine invertebrates, biostratigraphy and sequence stratigraphy.
Ausonio Ronchi (Pavia), Non-marine Permian basins in Europe, their stratigraphy and biota.
Martin Salamon (Krefeld), Conventional and unconventional Permo-Carboniferous energy resources in Europe.
Jörg Schneider (Freiberg), Vice-chair of the International Subcommission on Permian Stratigraphy; Co-leader of the proposed field trip to the classical Northwest-European Permian in central Germany; Permian marine – non-marine correlations.
Shuzong Shen (Nanjing), Chair of the International Subcommission on Permian Stratigraphy; Permian stratigraphy.
Vladimir Silantiev (Kazan), Chair of the 18th International Congress on the Carboniferous and Permian; non-marine Permian stratigraphy and biota.

Lucas F. Spencer (Albuquerque), Permo-Carboniferous vertebrate palaeontology and marine – non-marine correlations.

Sebastian Voigt (Thallichtenberg), Leader of the proposed field trip to the Pennsylvanian-Permian non-marine Saar-Nahe Basin, SW Germany; Carboniferous–Triassic non marine biota, palaeoichnology and palaeoenvironments

Xiangdong Wang (Nanjing), Chair of the International Subcommission on Carboniferous Stratigraphy; Carboniferous stratigraphy.

Volker Wrede (Krefeld): Leader of the proposed field trip to the Pennsylvanian paralic foreland basin of the Ruhr area; regional and structural geology, coals.

Silvio Zeibig (Kassel), Co-leader of the proposed field trip to the classical Northwest-European Permian in central Germany; Zechstein deposits of central Europe and salt mining.

Organization committee

Hans-Georg Herbig, Michael Amler, Sarah Esteban-Lopez, Sven Hartenfels, Hannah Czieszinski, Eliza Stehr (all University of Cologne), Markus Aretz (Université de Toulouse).

Venue

Cologne, the fourth biggest German city, is a vibrant metropolis with somewhat more than one million inhabitants in the western part of Germany. Based on an older local settlement, it was founded by the Romans and is thought to be the oldest city of Germany. During centuries people from many countries met in its open-minded atmosphere. Its flair is due to the unique location at River Rhine, the mixture of modern and historical buildings – the famous cathedral is included in the UNESCO world heritage list, and the many students visiting several universities. The University of Cologne, which will host the 19th ICCP has almost 50,000 students in six faculties covering the complete spectrum of natural and cultural sciences. Cologne is an ideal base to visit classical Carboniferous localities in the near-by Belgian Ardennes, the German Rhenish Mountains and the Ruhr area. Permian outcrops are somewhat more distant, but easily reached via a dense net of highways. Do not forget additional touristic highlights, including four UNESCO world heritages: scenic “Upper Middle Rhine Valley”, “Germanic-Rhaetic Limes”, the originally 550 km long boundary fortification of the Romans, as well as the rococo castles “Augustusburg” and “Falkenlust”, both only some kilometres south of Cologne.

Congress schedule

Pre-Congress field trips

July 28: Arrival in Cologne, Registration and welcome reception

July 29-August 2: Talks, poster-sessions, workshops

July 31: Mid-Congress Field trip

August 1: Congress Dinner (River Rhine Cruise)

August 3: Departure

Post-Congress field trips

Travel

Cologne is reached by a dense network of highways and high-speed trains. By air, it is reached via the airport Cologne-Bonn CGN (12,000,000 passengers/year, 130 destinations, also by low-cost carriers). Participants from overseas may find good travel deals to the airports of Düsseldorf DUS, Frankfurt/Main FRA, or even to Brussels BRU (Belgium) and Amsterdam AMS (The Netherlands). All airports are directly connected by high-speed trains with Cologne:

Düsseldorf (40 km, 25 min)

Frankfurt (180 km, 1 h)

Brussels (230 km, 2 h)

Amsterdam (280 km, 3h)

Please check to see if your visit in Germany will require a visa. On request, we will provide official invitation letters to delegates who need to apply for a visa.

Scientific programme

Talks and posters: The congress will take place in the central lecture hall of the University of Cologne. This will enable easy changeover between parallel sessions of talks. Time for oral presentation is limited to 20 minutes, including questions and discussion. The posters will be also displayed in the central lecture hall and be accessible during the entire duration of the congress. We plan to limit speakers to one presentation, but individuals may participate as non-presenting co-author in additional talks. The number of poster presentations per person is not limited. Poster format will be portrait layout DIN A 0 (width 841 mm, height 1189 mm). Details will follow in the second circular.

Proposed Sessions: Herein, we propose a framework of sessions/topics. However, we encourage the scientific community to propose additional sessions or more specialized 'subsessions' to the organization committee **until November, 15th 2018**. Proposals should be accompanied by an outline of the session topic, maximum 150 words long. Final acceptance will be based on the potential to attract a wide audience and to stimulate further research. Additional session titles will be published in the second circular.

A. The world of stratigraphy

- A1. Carboniferous stage boundaries, stratotype sections, and GSSPs
- A2. Permian stage boundaries, stratotype sections, and GSSPs
- A3. Carboniferous and Permian multistratigraphy and correlations (including isotope stratigraphy, magnetostratigraphy, sequence stratigraphy, and cyclostratigraphy)
- A4. Revision of the Devonian-Carboniferous boundary and associated events and extinctions
- A5. End-Permian extinction and early Triassic recovery
- A6. Late Carboniferous to earliest Triassic non-marine – marine correlation

B. The world of palaeontology

- B1. Carboniferous and Permian marine biota: taxonomy, palaeoecology, palaeogeography
- B2. Carboniferous and Permian non-marine biota and plants: taxonomy, palaeoecology, palaeogeography

C. The world of facies, environments and basin analysis

- C1. Carboniferous and Permian reefs, mounds, and biostromes
- C2. Carboniferous and Permian carbonate platforms and basins from cold-water to the tropics
- C3. Permian evaporite basins
- C4. Carboniferous and Permian siliciclastics and shales
- C5. Non-marine basins and environments of the Variscides and beyond
- C6. Permo-Carboniferous basins and environments from Gondwana
- C7. The Permo-Carboniferous glaciations - record and impact

D. The world of oceans and mountains

- D1. Carboniferous and Permian plate tectonics and the evolution of relief (building and deconstruction of mountains)
- D2. Carboniferous and Permian palaeoceanography

E. The world of economic geology

- E1. Carboniferous and Permian coals and evaporites
- E2. Carboniferous and Permian conventional and unconventional hydrocarbon systems
- E3. Carboniferous and Permian geothermal resources

Abstracts: Abstracts are due April, 15, 2019. A request for abstracts will be announced in the second circular, including instructions for the authors. Abstracts are limited to one page, format DIN A4. The fully citable abstracts will be published in *Kölner Forum für Geologie und Paläontologie*. The volume will be distributed to the registered delegates.

Proceedings: Congress proceedings will be published, but at the time being no final decision on the format has been made. However, we prefer a publication in the "Compte Rendue" style of earlier congresses, as in our opinion dispersion in several journals minimizes the importance and impact of the congress.

Workshops: Free workshops will be available for any colleagues or working groups on demand. Please contact us not later than April, 15th, 2019 with workshop titles, duration and expected number of participants. Rooms will be available for the business meetings of the Subcommissions on Carboniferous and Permian stratigraphy.

Proposed field trips

Field trip participation will be on a first-come first-served base. Independently to modifications/restrictions by the fieldtrip leaders a maximum of 30 persons per field trip is expected. Duration, excursion routes, and costs will be detailed in the Second Circular. Pre-congress and post-congress field trip themes supplement each other to enable maximum coverage for parti-

Participants interested in two field trips. Field trips will not require extensive walking or walking in rugged landscape except for some stops in post-Congress field trip C3.

A. Pre-Congress field trips

- A1. The Mississippian carbonate platform of the Ardennes, Belgium – fauna, facies, and stratigraphy.
- A2. The Mississippian Kulm Basin of the Moravo-Silesian Zone, southern Czech Republic – counterpart of the German Rhenish Mountains.
- A3. The classical Northwest-Central European Permian: continental “Rotliegend”, restricted marine to evaporitic deposits of “Zechstein”, and the Permian-Triassic transition in central Germany.
- A4. The Pennsylvanian of the Ruhr area, western Germany – fauna, facies, and stratigraphy of a paralic foreland basin of the Variscides including coal formation.

B. Mid-Congress field trips: to be announced in the Second Circular.

C. Post-Congress field trips

- C1. The Mississippian Kulm Basin of the Rhenish Mountains, western Germany – fauna, facies, and stratigraphy of a mixed carbonate-siliciclastic foreland basin.
- C2. The Pennsylvanian–Permian of the Saar-Nahe Basin, southwestern Germany – fauna, facies, and stratigraphy of an intramontane continental molasse basin of the Variscides.
- C3. The Pennsylvanian–Permian of the Southern Alps (Carnic Alps/Karavanke Mts.), Austria/Italy/Slovenia – fauna, facies and stratigraphy of a mixed carbonate-siliciclastic shallow marine platform along the northwestern Palaeotethys margin.

General information

Guest programme: No formal guest programme is planned at this time. All places of interest can be reached by foot or public transport. For information see the official website <https://www.cologne-tourism.com/>. Feel free to request further information from the organizers.

Accommodation: A large variety of hotels is available in Cologne. Prices during summertime are reasonable, as no trade fares or other big events will take place. We will suggest some which are in walking distance (max. about 30 minutes) to the congress location on the website. Student dormitories are not available, but low cost hostels and youth hostels might be booked.

Weather conditions: Due to its position relatively close to the Atlantic and the North Sea, Cologne has a mild, maritime influenced climate. Average maximum temperatures in July and August are 24°C during the day, minimum temperatures 12–13°C at night. Rain cannot be excluded and even some hot days with temperatures up to 30°C.

Type of clothing: A light rain coat and a sweater should be obligatory. For field trips bring also sturdy boots and, if possible, a hammer.

Registration

Electronic registration will be available on the Congress website <http://iccp2019.uni-koeln.de/> after December, 1, 2018. It is our wish to organize a meeting at reasonable prices to enable participation of a wide audience. The fees, however, still might be subject to minor changes due to pending funding.

Registration fees:

	Before March 15, 2019 (Early Bird)	March 15–May 30, 2019 (Late registration interval)
Regular participant	280 €; includes congress fee, printed abstract volume, printed volume of all field trips, additional USB stick with electronic versions of both volumes. Icebreaker party and refreshments during the sessions	330 €; includes congress fee, printed abstract volume, printed volume of all field trips, additional USB stick with electronic versions of both volumes. Icebreaker party and refreshments during the sessions
Student	190 €; as above, applies only with valid student ID card	240 €; as above, applies only with valid student ID card
Accompanying person	80 €; icebreaker party and refreshments during the sessions	100 €; icebreaker party and refreshments during the sessions

Important dates

August, 15th, 2018: First Circular; call for sessions

November, 15th, 2018: Deadline for proposal of sessions

December, 1st, 2018: Second Circular, opening of online registration

April, 15th, 2019: Deadline for Early Bird payment, abstract submission; announcement of workshops

May, 30th, 2019: Third Circular, end of late registration interval

Contact

Institute of Geology and Mineralogy
University of Cologne
Zùlpicher Strasse 49a
50674 Köln
GERMANY

Hans-Georg Herbig, Tel.: +
+49-221-4702533 Michael Amler, Tel.: +
+49-221-4705672 Sven Hartenfels, Tel.: +
+49-221-4703532 Eliza Stehr, Tel.: +
+49-221-4703532

Fax: ++49-221-4701663

Email: ICCP-2019@uni-koeln.de

Website: <http://iccp2019-Cologne.uni-koeln.de/>



15th Brazilian Symposium on Paleobotany and Palynology

September 4 to 7, 2019

The Brazilian Botany Society (SBB), through its Nucleus of Specialists in Palynology (NEPAL), the Latin American Association of Paleobotany and Palynology (ALPP), the Brazilian Society of Paleontology (SBP) and the Federal University of Mato Grosso (UFMT) invite teachers, researchers and students to participate in the XV Brazilian Symposium on Paleobotany and Palynology, which will take place in the city of Cuiabá-MT between 04 and 07 September 2019.

For more information: <https://xvsbpp.wixsite.com/xvsbpp/inscricoes>





XV International Palynological Congress

XI International Organization of Palaeobotany Conference

200 Years of Palaeobotany

12-19 September, 2020, Prague, Czech Republic

Dear colleagues,

Please allow me to invite you to the XVth International Palynological Congress and XIth International Organization of Palaeobotany Congress at the Clarion Conference Hotel, Prague, Czech Republic. The congresses will be held together to provide an opportunity for palynologists and palaeobotanists to see, hear, discuss and meet one another after four years. The meeting will be held from September 12th - 19th, 2020. The organising team of Czech and Slovak palynologists and palaeobotanists believes that the congress will provide an opportunity for palynologists to learn more about plants and for palaeobotanists to learn more about palynomorphs. The interactions of both disciplines will be of benefit to all.

The meeting is promoted by the collective efforts of the International Federation of Palynological Societies (IFPS) and the International Organisation of Palaeobotany (IOP).

The scientific programme will cover all aspects of palaeo- and actupalynology and palaeobotany including: Taphonomy, Airborne pollen, Methods in palynology and palaeobotany, Pollen/Spore morphology, Pollination ecology, Forensic palynology, Melissopalynology, Quaternary palynology and palaeobotany, Cenozoic palynology and palaeobotany, Mesozoic palynology and palaeobotany, Paleozoic palynology and palaeobotany, and Proterozoic palynology.

We hope you enjoy your stay!

Jiří Bek
Head of Organizing Committee

Field Trips

Lower Palaeozoic of the Barrandian area

Each day will leave Prague in the morning and return in the evening. Two to three-day field-trips in the Cambrian to Devonian sediments south west 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.



Pennsylvanian plants of Western Bohemia

Two field trips can be organized. One visiting the area of the Permian of Chemnitz (Germany), second to the Late Carboniferous of Western Bohemia (Czech Republic). Old and new outcrops will be open for participants.



Tertiary of North Bohemia

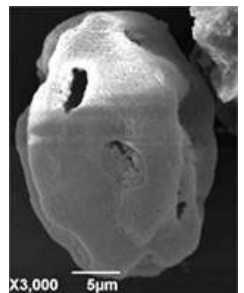
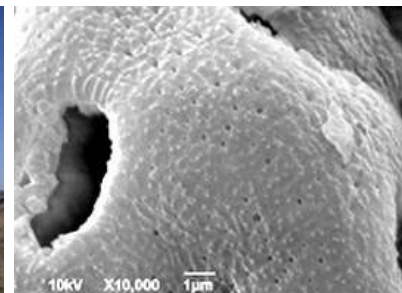
Remnants of Eocene to Pliocene rocks are preserved in depressions and grabens, mainly along the Krušné hory piedmont. Besides fresh-water coal-bearing deposits, the products of volcanic centres occur in Western and Northern Bohemia, forming the eastern branch of the European Cenozoic Volcanic Alkaline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



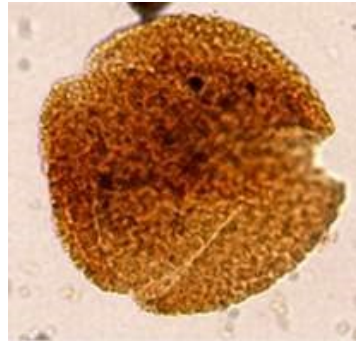
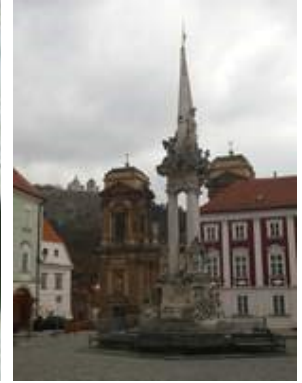
Southern Moravia

Quaternary: palynology, geology

Localities: Vracov, Vacenovice, Čejčské jezero
Lakes Mikulčice, Pohansko – centres of the Great Moravia
Dolní Věstonice – pedocomplex, loess
Pavlovské vrchy Hills
Pasohlávky – settlement
Confluence of the Dyje, Kyjovka, Morava Rivers
Bulhary – former palaeomeander
Lednice – Valtice area



TERTIARY – Miocene - Carpathian foredeep Moravian karst – approx. 15 palynologically evaluated caves.



More information at:
<http://prague2020.cz/index.php>
Email:
prague2020@conferencepartners.cz