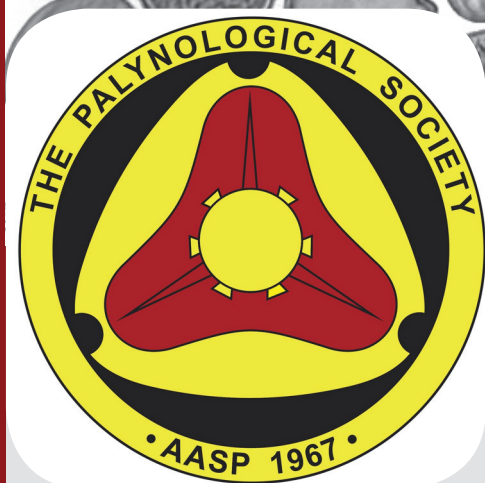
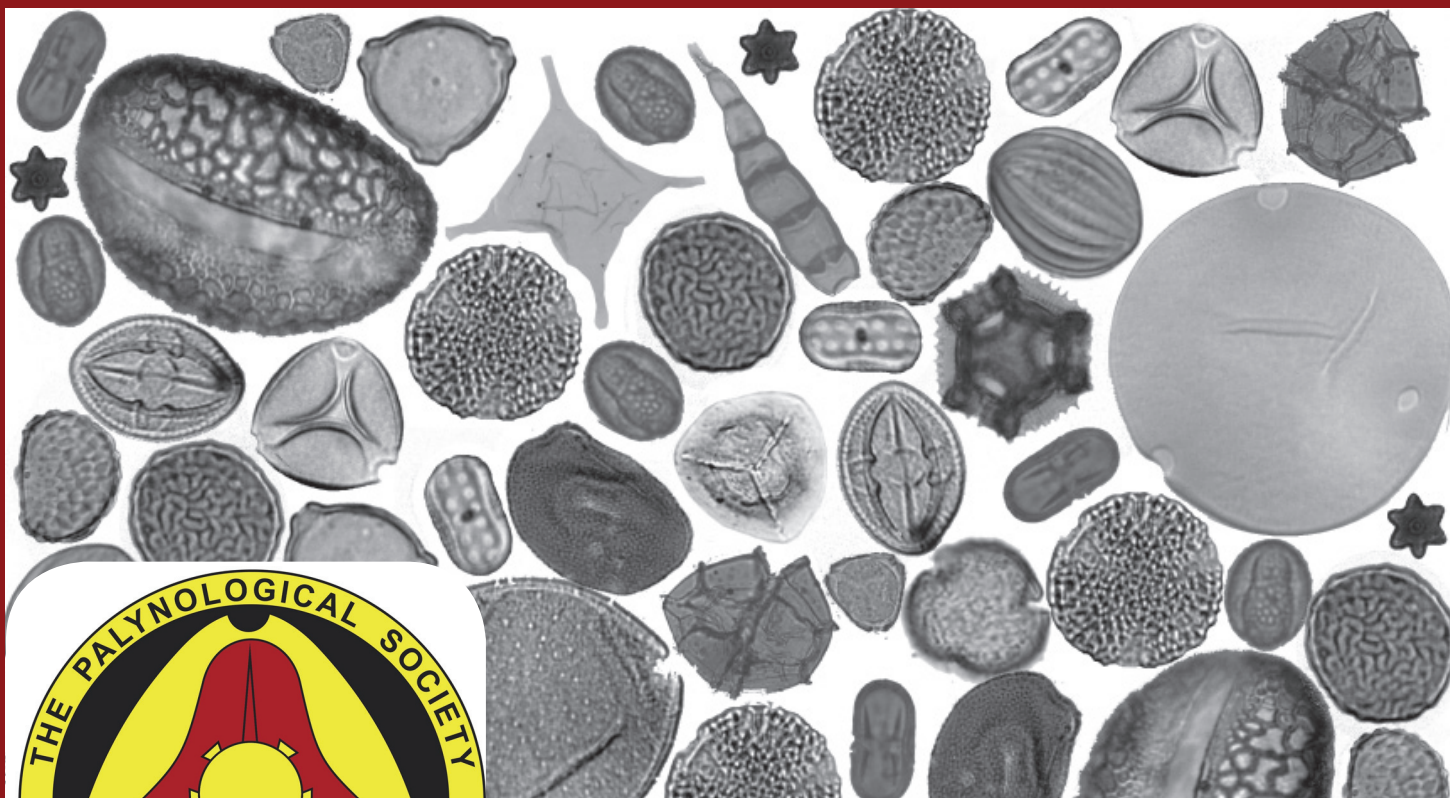


AASP - THE PALYNOLOGICAL SOCIETY

PROMOTING THE SCIENTIFIC UNDERSTANDING OF PALYNOLOGY SINCE 1967



Newsletter

September 2017

Volume 50, Number 3

Published Quarterly by AASP - The Palynological Society



AASP-TPS NEWSLETTER

Published Quarterly by AASP - The Palynological Society

September 2017 Volume 50, Number 3

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A.A.S.P.

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* (triannually), 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)

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

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Volume 50, Number 3
Jen O'Keefe, Editor

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**POSITION OPEN - PLEASE SEND LETTER OF INTEREST TO
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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 **November 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

Well here goes with my final newsletter; seems like 5 minutes ago since I wrote the first one. I'm just back from driving 12 hours to view the eclipse and am feeling a little groggy. In addition, a hurricane is rolling in towards the Gulf Coast so I'm feeling a little in awe regarding the power and beauty of nature. On that note, I am pleased to announce that the 50th anniversary jewelry is finally here. In the last newsletter, I included photos of the plastic prototypes. I now have examples of the actual silver necklaces. I will bring these to Nottingham. The board needs to decide how we go ahead with making orders. Cost will be c. Eu130; I know this sounds quite a bit but they are larger than the pictures look (c.3/4" in diameter); they look amazing. My thanks to John Firth who supplied the 3D scan and other info for *Diphyes recurvatum* and Ingrid Camero who completed the same for *Macrolobium multijugum*. These are exclusively available through the society.



Diphyes recurvatum for 50th Anniversary AASP

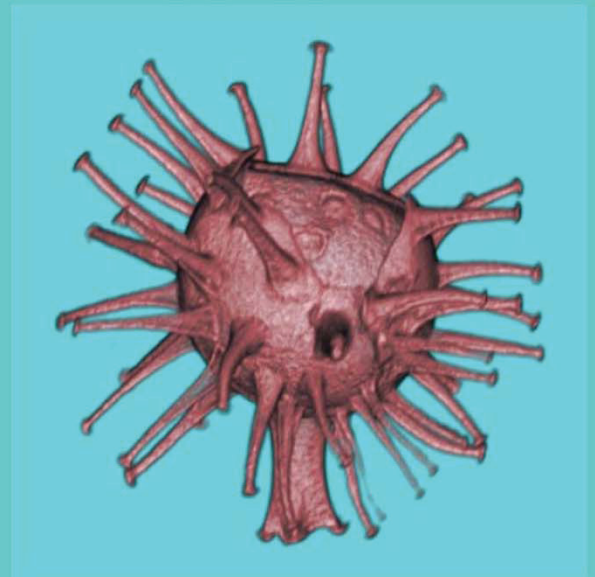
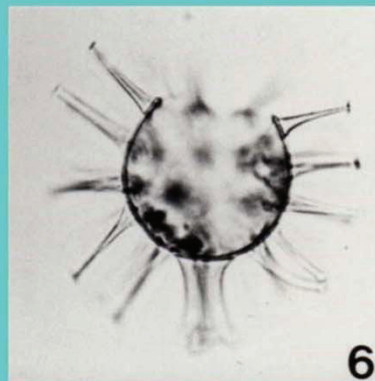
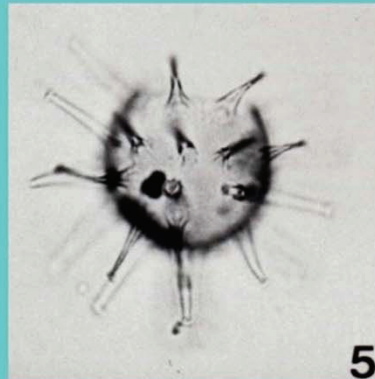
© 2017 John V Firth

Diphyes recurvatum May, 1980. p. 50-51, pl.1, figs.18-20.

Specimen from Firth, J.V., 1984 M.S. Thesis, VPI&SU, Plate 6, figs. 5-6, and from Firth, J.V., 1987, Palynology 11, p. 205, Plate 1, fig. 6. Slide AY-33 from Providence Sand Formation, age Maastrichtian. Depth in core 994 feet = 302.97 m (error in Firth, 1987: depth was incorrectly converted to 303.2 m). Specimen = 63 µm high x 65 µm wide.

(Left, top and bottom): Fig. 5 ventral view, Fig. 6 optical cross-section, transmitted light.

(Below): Confocal autofluorescence image, excitation wavelength = 488 nm. Image scan credit: Stanislav Vitha at Texas A&M University Microscopy and Imaging Center. Volume rendering, surface rendering and print file preparation by John V. Firth.





Macrolobium multijugum for 50th Anniversary AASP

©2017 Ingrid Romero

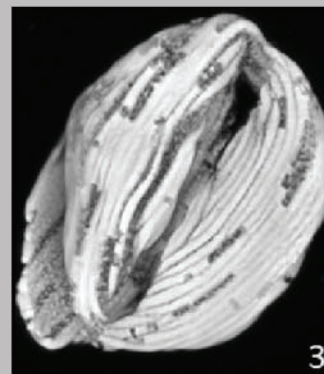
Macrolobium multijugum (DC.) Benth.

Family Fabaceae. This is a neotropical tree species, restricted to northern South America. Genus *Macrolobium* (Fig. 1, 2) has been related with *Striatopollis catatumbus* (Fig. 3), a fossil pollen grain registered in the tropics since the Paleocene (~65 Ma) and described for first time by Gonzales-Guzman (1967).

Top to Bottom: Equatorial view (Fig. 1) and cross section (Fig. 2).

Fossil *Striatopollis catatumbus* (Fig. 3): Equatorial view

Photos were taken with Ayriscan Superresolution Microscopy. Magnification: 100X. University of Illinois, Urbana-Champaign



I'm delighted to announce that the results of the recent elections are in. Katrin Ruckwied is elected as President Elect and Annette Goetz as Director at Large. I have had the pleasure of working with Katrin over the last 9 years and also of arranging courses in South Africa with Annette and Katrin. They will both be valuable additions to the board. In addition the proposed changes to the bylaws were approved. From now on, future Presidents starting with Gunn will serve two years. This extended period will allow the society greater stability and more time to resolve some issues. During this transition period, Katrin will serve as President-Elect for 2 years; I will remain as Past President for one year, after which the board will permanently be reduced by one member (there will never be a Past President and President-Elect at the same time). Thanks also at this time to various outgoing board members, especially Guy Harrington (Past President).

Nottingham beckons and from the program it looks like we have a great conference coming up. I'm particularly looking forward to it as I grew up between Nottingham and Derby and haven't been back for decades. I'm even giving a talk from my undergrad days based on palynological work done in Derbyshire for my dissertation. My thanks to Jim Riding, Jan Hennissen, Stewart G. Molyneux, Maria Wilson, Matthew J. Pound, Reed Wicander, and Barry Lomax for organizing what looks like being a thoroughly enjoying and successful conference.

I have also been involved with Tom Demchuck's keynote. A very interesting overview of the ups and downs of the societies' 50 years. I think with some of the changes we have made the society's financial future is ok but continually needs to be looked at closely. Especially because the number of members is fluctuating and declining. Generally our members are not from the climatic/quaternary/archaeological worlds. This is something we need to address and the board will be discussing how to do this.

In addition we are seeing great changes and improvements at LSU now that Dr. Sophie Warny holds the CENEX endowed Chair. In addition, both David Pocknall and Sophie have had several talks about how to best move forward with the CENEX committee; as it is currently formed, it is no longer needed. They have suggested to have a board with folks interested in actively assisting CENEX to further thrive and move forward with better connections with the industry and additional collaboration with university partners. CENEX needs funding to get students, which is going to be very hard to get in the next three years with climate change programs being cut and the oil industry in crisis. If anyone is particularly interested in this please let the board know.

So that's it – finally done with my last newsletter – I will send this to Jen before the power goes out. See you in Nottingham – weather permitting!

Iain Prince
Houston, TX
25 August 2017



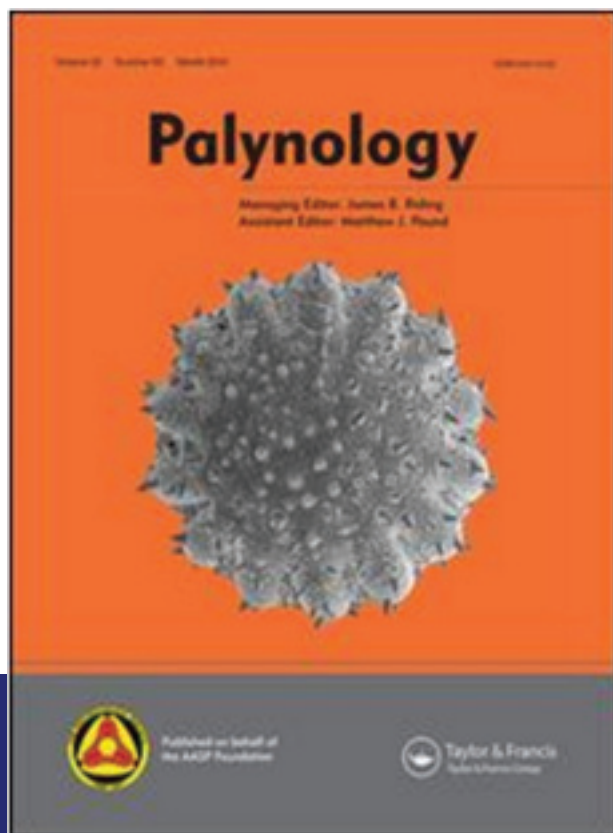
MANAGING EDITOR'S REPORT

Some very good news was announced in June 2017. The Journal Citation Report (JCR) for 2016 reported that the 2016 two-year impact factor for Palynology has increased to 1.543. This is big improvement (+0.479) relative to the 2015 two-year impact factor of 1.064. Palynology is now ranked 20/53 in Palaeontology, and 90/211 in Plant Science. The impact factor is an important metric; it is calculated by taking the number of citations that articles published in 2014 and 2015 received during 2016, then dividing by the number of articles published in 2014 and 2015. This is the highest we have ever been, exceeding the 1.348 achieved in 2012. It is an excellent outcome that demonstrates the continued development of Palynology. We are still well ahead of Grana (1.085), and just behind Review of Palaeobotany and Palynology (1.817).

As I write, issue 3 of Palynology Volume 41 is imminently about to be published online. Society members and subscribers will be able to freely access this issue, which is dated August 2017. The contents are listed below; it comprises an obituary of Art Sweet plus 11 research papers over 141 pages. The important Paleogene dinoflagellate subfamily Wetzelielloideae is well represented in this part. There is a very nice paper on material from France and Kazakhstan by Alina Iakovleva, plus a comment on the paper on this group published in this journal by Graham Williams and co-authors in 2015. The comment is by Peter Bijl et al. and Williams et al. were offered an opportunity to respond, which they did. The running order of Part 4 is nearly finalised and will be announced in the next Newsletter. Paper copies of parts 3 and 4 will be posted out together in November 2017. I hope to have updates on the two Supplements currently in production by the next Newsletter.

James B. Riding
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United Kingdom
Tel: +44 (0)115 9363447
E-mail: jbri@bgs.ac.uk

7th August 2017



The contents of Palynology Volume 41, Part 3 (online only; paper copies to be posted with Part 4)

1. Obituary Arthur Richard ('Art') Sweet (1942–2017) 2 p.
2. Poliakova, A., Zonneveld, K.A.F., Herbeck, L.S., Jennerjahn, T.C., Permana, H., Kwiatkowski, C. and Behling, H. High resolution multi-proxy reconstruction of environmental changes in coastal waters of the Java Sea, Indonesia, during the late Holocene. 14 p.
3. Iakovleva, A.I. Did the PETM trigger the first important radiation of wetzelielloideans? Evidence from France and northern Kazakhstan. 28 p.
4. Horrocks, M., Baisden, W.T., Flenley, J., Feek, D., Love, C.M., Haoa-Cardinali, S., Gonzalez Nualart, L. and Edmunds Gorman, T. Pollen, phytolith and starch analyses of dryland soils from Easter Island (Rapa Nui) show widespread vegetation clearance and Polynesian-introduced crops. 12 p.
5. Price, A.M., Baustian, M.M., Turner, R.E., Rabalais, N.N. and Chmura, G.L. *Melitasphaeridium choanophorum* – a living fossil dinoflagellate cyst in the Gulf of Mexico. 7 p.
6. Cartaxo-Pinto, S., Mendonça, C.B.F., Lopes, R.C. and Gonçalves-Esteves, V. Pollen morphology of species of *Cissus* (Vitaceae): an evaluation of ornamentation. 11 p.
7. Kailas, J.G., Naik, M.C., Bheemalingappa, M., Ramakrishna, H., and Rao, B.R.P. Arboreal diversity in the Andaman Islands, India, based on pollen. 19 p.
8. Tripathi, S., Basumatary, S.K., Bera, S.K., Brahma, M. and Sarma, G.C. A palynological study of natural honeys from the Bongaigaon district of Assam, northeast India. 12 p.
9. Quamar, M.F. and Nautiyal, C.M. Mid-Holocene pollen records from southwestern Madhya Pradesh, central India, and their palaeoclimatic significance. 11 p.
10. Leite, F.P.R., Paz, J., do Carmo, D.A. and Silva-Caminha, S.A. The effects of the inception of Amazonian transcontinental drainage during the Neogene on the landscape and vegetation of the Solimões Basin, Brazil. 11 p.
11. Bijl, P.K., Brinkhuis, H., Egger, L.M., Eldrett, J.S., Frieling, J., Grothe, A., Houben, A.J.P., Pross, J., Śliwińska, K.K. and Sluijs, A. Comment on 'Wetzeliella and its allies – the "hole" story: a taxonomic revision of the Paleogene dinoflagellate subfamily Wetzelielloideae' by Williams et al. (2015). 6 p.
12. Williams, G.L., Damassa, S.P., Fensome, R.A. and Guerstein, G.R. A response to 'Comment on Wetzeliella and its allies — the "hole" story: a taxonomic revision of the Paleogene dinoflagellate subfamily Wetzelielloideae by Williams et al. (2015)'. 8 p.

Introducing the 2017-2018 Board of Directors!



Gunn Mangrud, President; Stephen Stukins, Secretary, Katrin Ruckwied, President-elect; James Riding, Managing Editor; Ingrid Romero, Student Director-at-Large; Rebecca Hackworth, Treasurer. ; Niall Paterson, Director-at-Large; Anette Goetz, Director-at-Large; Iain Prince, Past-President.

Congratulations to Student Travel Grant Winners!

France Polette, Rennes 1 University, France

I am a PhD student on French Cretaceous continental palynology, just about to finish my first year at Rennes 1 University (Brittany, France). I will attend the forthcoming AASP-TPS meeting in Nottingham, where I will be presenting the preliminary results on the palynological content of the most famous “French Wealden” dinosaur bone-bed: Angeac. The studied material comes from four sedimentological units (An2–An5), which yielded altogether an assemblage of 31 species, taxonomically dominated by verrucate spores. The criteria for the identification of the latter commonly being regarded as problematic, a PCA has been carried out on 60 well-enough preserved specimens from the most productive unit An2, taking into account eight morphological variables. The results of this preliminary statistical analysis will be discussed at the meeting, as well as the age of deposition of the sediments, of which previous determination has recently been questioned. This work aims to improve our understanding of the still little known French Lower Cretaceous continental palynology.



Vânia Fraguito Correia, Algarve University, Faro, Portugal



I am studying the Lower and Middle Jurassic dinoflagellate cysts from the Lusitanian Basin in Portugal as part of my PhD project. The Lusitanian Basin is a marginal depocenter in central western Portugal. The Cabo Mondego section, located in the western Lusitanian Basin, comprises a well-exposed upper Toarcian to Callovian succession. In the 50th Annual Meeting of AASP-The Palynological Society, in Nottingham (BGS, Keyworth), I will present the latest results of my study: “Uppermost Bathonian and Callovian (Middle Jurassic) dinoflagellate cysts from Cabo Mondego, Lusitanian Basin, Portugal: preliminary results.” In general, the dinoflagellate cysts are abundant and relatively well preserved. This presentation documents the first biostratigraphical record of upper Bathonian and Callovian from the Lusitanian Basin based on dinoflagellate cysts. It also contributes to the understanding of the dinoflagellate palaeobiology and palaeogeography during the Callovian. The AASP Student Travel Grant will allow me to attend this important international meeting in order to present and discuss my work and also learn more about palynology with world researchers.

Congratulations to Student Travel Grant Winners!

Florian Schwarz, Northumbria University Newcastle, United Kingdom

At the 50th annual meeting of the AASP I presented high-resolution pollen results from the NW Qaidam Basin and preliminary pollen results from the Kunlun Pass Basin in order to characterise the evolution of Westerly Winds and East Asian Summer Monsoon during the Pliocene. The pollen record from the SG-1b core indicates that during the mid-Piacenzian warm period semi-desert vegetation (especially *Artemisia* and *Chenopodiaceae*) dominated NW Qaidam Basin. Using a pollen transfer function, initial climate estimation of the pollen record shows that the palaeoprecipitation was significantly higher during the mPWP compared to present day. Furthermore, comparison of our palynology results with the global benthic $\delta^{18}\text{O}$ stack from Zachos et al. (2001) suggests that increased palaeoprecipitation in the Qaidam Basin occurred during warmer intervals.

The preliminary pollen results of the Kunlun Pass Basin indicate that semi-desert vegetation dominated during the early Pliocene. Since the Kunlun Pass Basin is roughly 2000 m higher than the Qaidam Basin nowadays (and shows a different vegetation), future work will include extending the pollen record until early Pleistocene to identify vegetation changes that might be connected to tectonic uplift during the Pliocene.



*Looking ahead to the 51st Annual Meeting in Calgary?
Student Travel Grants will be available!*

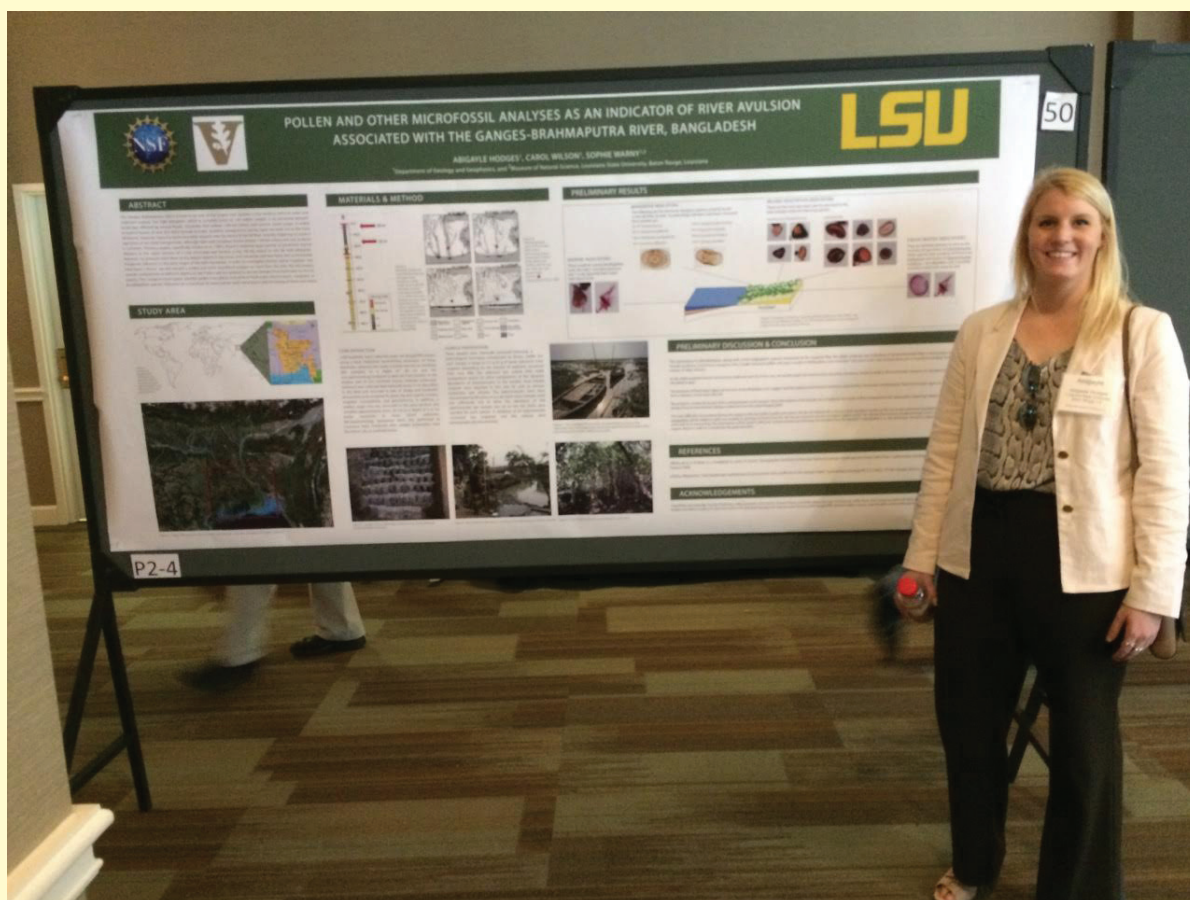
*Applications are typically due immediately following
the abstract submission deadline.*

*Instructions for applying will appear in the March 2018
Newsletter.*

Congratulations to the Undergraduate Award Winner!

**Abigayle Hodges, Louisiana State University, Baton Rouge, Louisiana, USA.
Submitted by Sophie Warny**

Abigayle Hodges is an undergraduate student at LSU in Geology and Geophysics. She took my micropaleontological class and did really well. She was a very enthusiastic student. While taking my class, she was also taking a class from Dr. Carol Wilson. During that class, they discussed a project that Dr. Wilson was conducting in Bangladesh. Abi had the idea to combine her passion for both classes and asked Dr. Wilson and I if she could try to extract palynomorphs from Dr. Wilson's core from Bangladesh to see if she could gather paleo-environmental information. We were happy to work with Abi on this test. Abi worked hard all semester on this pilot study, and she presented the results at the AASP conference in Houston. Way to go Abi!



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 AASP 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, Morehead State University, and Trinity College Dublin.

A faculty member, who is a member in good standing of AASP, 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: mbfarley@sigmaxi.net. Upon approval by the Awards Committee, faculty teaching approved courses may nominate a student to receive the award at any time of the year on the basis of their qualifying criteria 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 (palynologylexington@gmail.com) or associate editor (Gilda.Lopes@uib.no) 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 in the Society to include 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:

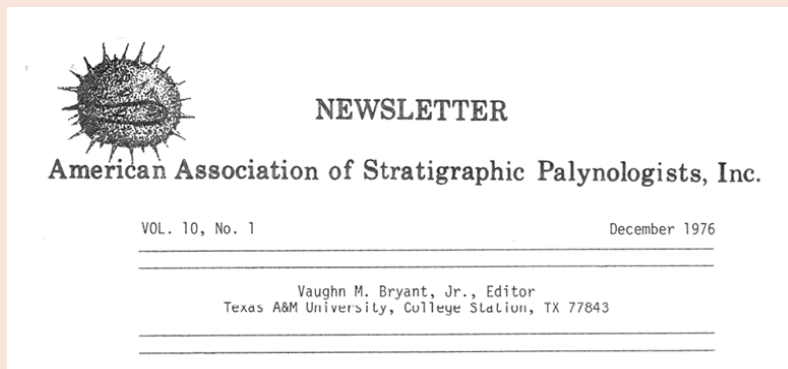
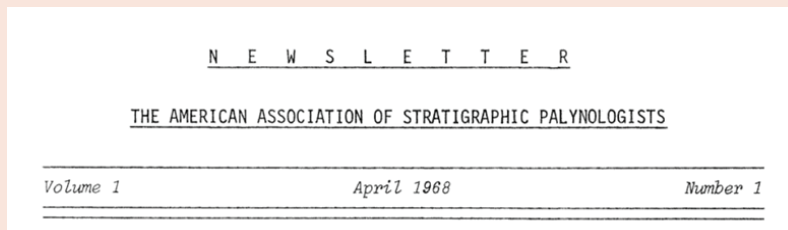
Number of hours of palynological instruction:

Criteria used to determine the winning student:

Date:

Celebrating the AASP Newsletter's 50th issue!

2017 has been a year of celebration and a year of delays. We continue to perservere and in this issue, celebrate the covers of newsletters past!



Over our 50 year history, the newsletter has been a staple of member communication. Even in the digital age, the quarterly newsletter is our key piece of communication.

The first format was a single-column document with a very simple header; no true "cover page" was printed. In 1976, this header was re-formatted and pollen art added. In 1979, the heading changed format yet again, with the addition of the newly approved logo.

The logo has remained a key component of the cover, graced with laurels for our 30th anniversary and forming a key part of the previous and current covers.

As our new newsletter editor takes over in September 2018, what stamp will they place on the newsletter?



How many of you correctly guessed the identity of our previous newsletter editors in NL 50-2? They were: 1) John Wrenn; 2) Judy Lentin; and 3) Dick Hedlund.



Eline van Asperen, Durham University, UK

The VIIth Workshop on Non-Pollen Palynomorphs took place from 12 to 14 June 2017 and was hosted by the University of Liverpool. The workshop was organised by Fabienne Marret-Davies, Rachael Lem, Karen Halsall, Colette Campbell (all University of Liverpool), Lee Bradley (Manchester Metropolitan University) and Eline van Asperen (Durham University). The workshop was supported by the School of Environmental Sciences of the University of Liverpool and by grants from The Micropalaeontological Society and the Palaeontological Association. The workshop was attended by 34 participants from 12 countries, with 16 oral presentations, 14 posters and 2 lab sessions.



The workshop started with a keynote lecture by Prof Emilie Gauthier from the University Bourgogne Franche-Comté on human Medieval impact on the environment, looking at three case studies from marginal environments: the Jura mountains in France, Norse settlements in Greenland, and the Serteya region in Russia. The keynote was followed by talks ranging in chronology from the Cretaceous to the modern environment, and showed the relevance of the study of non-pollen palynomorphs (NPPs) for archaeology and environmental studies. Jen O'Keefe (Morehead State University) discussed how fungal palynomorphs from Cretaceous to middle Eocene coals from the Mississippi Embayment can shed light on peat depositional and decompositional histories. Daniil Gornov (Saint Petersburg State University) compared subfossil spores and pollen from the Golovnin volcanic caldera on Kunashir Island (Kuril Islands) with the recent vegetation. Lyudmila Shumilovskikh (University of Göttingen) presented a new database of NPPs to facilitate taxonomy and identification. On the website (<http://nonpollenpalynomorphs.tsu.ru/>), interested researchers can also sign up for a newsletter on NPPs. Maia Chichinadze (Georgian National Museum) showed how a palynological analysis of archaeological artefacts from the antique Georgian site of Vani yielded detailed information about human manufacturing methods and use of the artefacts. Eline van Asperen (Durham University) indicated that taphonomic factors may bias preservation

of dung fungal spores, leading to problems with interpreting spore abundance as representing large herbivore abundance.

The afternoon of the first day of the workshop was dedicated to fungal palynomorphs. Jen O’Keefe and Eline van Asperen presented a range of fungal palynomorphs and discussed issues of preparation and interpretation. This was followed by observations of these NPPs using the state-of-the-art microscopy facilities at the University of Liverpool’s Central Teaching Hub.



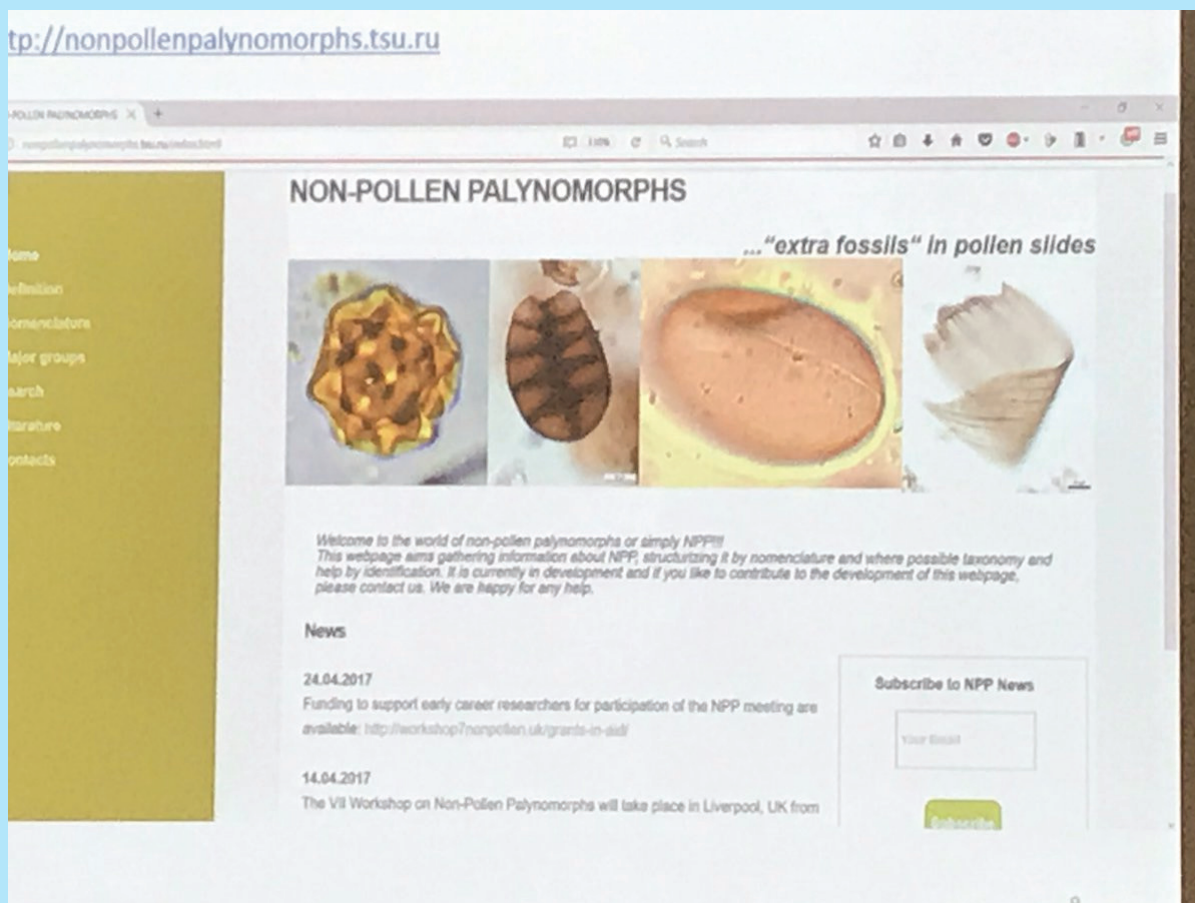
The first presentation of the second day of the workshop, by Eliso Kvavadze (Georgian National Museum), showed how the presence of characteristic starch, plant epidermis and insect assemblages indicate Neolithic and Bronze Age ceramic vessels from Georgia were used to store wine. In similar study, Inga Martkoplshvili (Georgian National Museum) was able to distinguish between storage of flour and storage of cooked cereals, as well as meat. Benjamin Dietre (University Bourgogne Franche-Comté) discussed cross-correlations between micro-charcoal, pollen and NPPs, indicating how different taxa react differently to fire events. Angelina Perrotti (Texas A&M University) presented pollen and NPP assemblages from the Page-Ladson archaeological site (Florida). Frank Schlütz (Lower Saxony Institute for Historical Coastal Research) showed how NPPs can indicate depositional processes in marine and coastal environments. Irene Tunno (Lawrence Livermore National Laboratory) compared NPPs from a sediment core from Stonehouse Meadow in the Great Basin with NPPs in the modern landscape. Marie-Claire Ries (University of Innsbruck) took us to the Neolithic lake village of Weyregg-II where NPPs gave information about livestock presence and human health. Althea Davies (University of St. Andrews) tested the use of dung fungi as indicators of historical grazing in peatlands by comparing their record with those of pollen and stocking patterns. Jean Nicolas Haas (University of Innsbruck) provided a taxonomic review of the fungus *Gelasinospora*, indicating that the use of the genus as an indicator of fire events must be questioned. Finally, Renéé Enevold presented a sophisticated statistical study demonstrating how even NPPs of unknown taxonomy can provide environmental information.



After a lunch break during which much discussion took place around the posters, the first part of the afternoon laboratory session was devoted to unidentified NPPs. Later, there was further opportunity to study slides with help of the microscopes. Many participants had taken the opportunity to bring photos and slides. Discussions continued over food at the conference dinner at Ego Restaurant that evening.

A round-table discussion took place on the final morning of the workshop. One of the problems the NPP community encounters is that it is difficult to obtain funding for meetings and research focused on NPPs. One reason for this is that the community has developed around a tool (the use of non-pollen palynomorphs to answer environmental questions) rather than a big question. The variety of the presentations at the workshop shows that this tool can be put to use in a wide range of fields (palaeoecology, archaeology, human impact on the environment, conservation) but it is difficult to formulate a single overarching research question. Some suggestions for an overarching theme included disturbance, local processes, ecosystem linkages, dynamics and megafauna. A number of funding and publication opportunities were identified, such as PAGES working groups, EU COST action, TMS special publication or a special issue of the Journal of Micropalaeontology, and INQUA recognised project awards. Special sessions on NPPs will be proposed for the next EPP (Dublin, 2018) and INQUA (Dublin, 2019) congresses, whilst the next NPP workshops will take place in Barcelona (2019), Poland (2021) and potentially Baton Rouge (2023).

Technical issues were also discussed. Minimal counts necessary to recover a full spectrum of NPPs can be obtained by using a rarefaction curve. Taxonomy and identification issues are being addressed by the development of the NPP online database, as well as in a QRA technical guide on fungi in Quaternary studies, which is in preparation. There is scope for training or summer schools to be developed, possibly within the context of existing palaeoecological training courses. After a fruitful discussion, it was time to go home. The workshop generated much debate over high-quality research, and we look forward to the next NPP workshop in Barcelona in 2019!



DINO11

July 2017

Fabienne Marret, University of Liverpool

The 11th International conference on modern and fossil dinoflagellates (<http://laplf.org/dino11/news.htm>) took place on the campus of the University of Bordeaux, in Talence (France), from the 17th to the 21st of July 2017, in the brand new Geosciences teaching building. A fantastic organising team, led by Frederique Eynaud, greeted 127 participants from 27 countries with the highest number from France, closely followed by Canada. A total of 71 oral presentations and 42 posters were given, from 8am to 7.30pm, from Monday (17th) to Thursday (20th). Friday morning was dedicated to a series of workshops, and the afternoon, to a field excursion in the Miocene of the Aquitaine Basin, led by Laurent Londeix. Talks and posters were grouped into two main sessions, session 1 comprising the following themes: Biodiversity and systematics; Dinoflagellate life cycles and nutritional strategies; Dinoflagellate ecology; Toxic dinoflagellates: from cells to cysts; Marine to freshwater transition and gradient in the dino world; Modern dinoflagellates and cysts: what we can learn from sediments. Session 2 included: Neogene to modern dinocysts in palaeoceanographic studies; Mesozoic and Cenozoic dinocyst stratigraphies; Phanerozoic and deep time scale; Dinocyst systematics; Dinocyst chemistry and preservation / carbon cycles; Integrated studies derived from dinocysts: recent past to modern scales. Talks (grouped in sub-sessions) were programmed to alternate between genetics, biology, ecology, deep-time stratigraphy... Each day was concluded by an invited keynote, with, on Monday, a review on the evolution of toxin synthesis in dinoflagellates by Shauna Murray. On Tuesday, Stijn de Schepper gave a presentation on the evolution of sea ice and surface circulation in the Nordic Seas during the Pliocene. The last keynote, on Wednesday, was given by Rob Fensome, looking back at the dinoflagellate evolution, from a fossil perspective with genetic insights. The conference was rich in new developments in genetic studies, a possibly necessary step to better understand dinoflagellate ecology and their evolution. It was also very well catered, with an excellent lunch buffet and very fulfilling coffee/tea breaks, enabling to sample the regional food (foie gras, confit de canard, etc). Which brings me to the Gala Dinner that took place on the Wednesday evening at Château Luchey-Halde (<http://luchey-halde.com/fr/chateau-pessac-leognan/>), where we visited the vineyard and the wine making cave. This was followed by very tasty appetizers (amuse-bouches), a wine degustation while overlooking the sun setting over the vineyard and a delicious three course dinner.





Four workshops were organised on Friday morning (<http://laplf.org/dino11/workshops.htm>), to discuss the use (or not) of a dual nomenclature; to statistically explore dinoflagellate cyst database for palaeoceanographical studies; to examine modern benthic and planktonic dinoflagellates as well as fossil dinocysts under the microscope. In the afternoon, Laurent Londeix took us to discover oyster reef beds from the Miocene (and the Saint-Croix du Mont) and the Réserve Géologique de Saucats – La Brède.

Five awards, of €300 each, were given to young researchers, with for the best PDRA talk, Manuel Bringué (Dinoflagellate cyst production in the Cariaco Basin: a 12 year-long sediment trap study); the best student talk in Session 1, Anze Zerdoner-Calasan (Repeated diatom capture in dinophytes hosting a tertiary endosymbiont (Kryptoperidiniaceae, Peridiniales); the best student talk in Session 2, Peter Gurdebeke (A new centennial scale Holocene dinoflagellate cyst record from Vancouver Island (British Columbia, Canada), the best student poster in Session 1, Anne-Sophie Pavaux (Competition between two Mediterranean benthic microalgae: Endo/Exo metabolome study and physiological responses) and the best student poster in Session 2, David Kroeck (Ecophenotypism in early Palaeozoic acritarchs –Comparisons with recent dinoflagellates).

Two suggestions were presented for the venue of the next DINO12 in 2020, and Las Palmas of Canary Islands was voted by the majority.



Correspondents Wanted!

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
South Africa

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

- Jen O'Keefe

Call to Serve!

Immediate Opening: GSA Liason

Responsibilities:

- 1) Exhibit the AASP-The Palynological Society Booth (display, books, handouts, etc.) at the Annual Meeting of the Geological Society of America (GSA) Meeting. You are responsible for:
 - seeing that the booth is "manned" during the exhibit hall opening & high-traffic times of day;
 - reserving booth space & accoutrements (chairs, table, skirt);
 - obtaining up-to-date display materials from the AASP Foundation and the society;
 - transport & maintain the display ("the booth").
- 2) Attend the Associated Societies Meeting at the Annual Meeting of GSA in person.
- 3) Attend the GSA Associated Societies Midyear Meeting (via internet or in person).
- 4) Exhibit at additional venues as requested by the AASP-TPS Board of Directors.

Opening Fall 2018: Newsletter Editor

Responsibilities:

- 1) Produce the AASP-TPS Newsletter Quarterly.

Interested? Contact Outgoing President Iain Prince or Incoming President Gunn Mangrud!

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, 2016**.

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.

2017 AASP Foundation Century Club Contribution Form

Name: _____

Address: _____

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

Contribution Enclosed: \$ _____

I wish to pledge: \$ _____

FUTURE MEETINGS OF AASP - THE PALYNOLOGICAL SOCIETY

2018 - 51st Annual Meeting

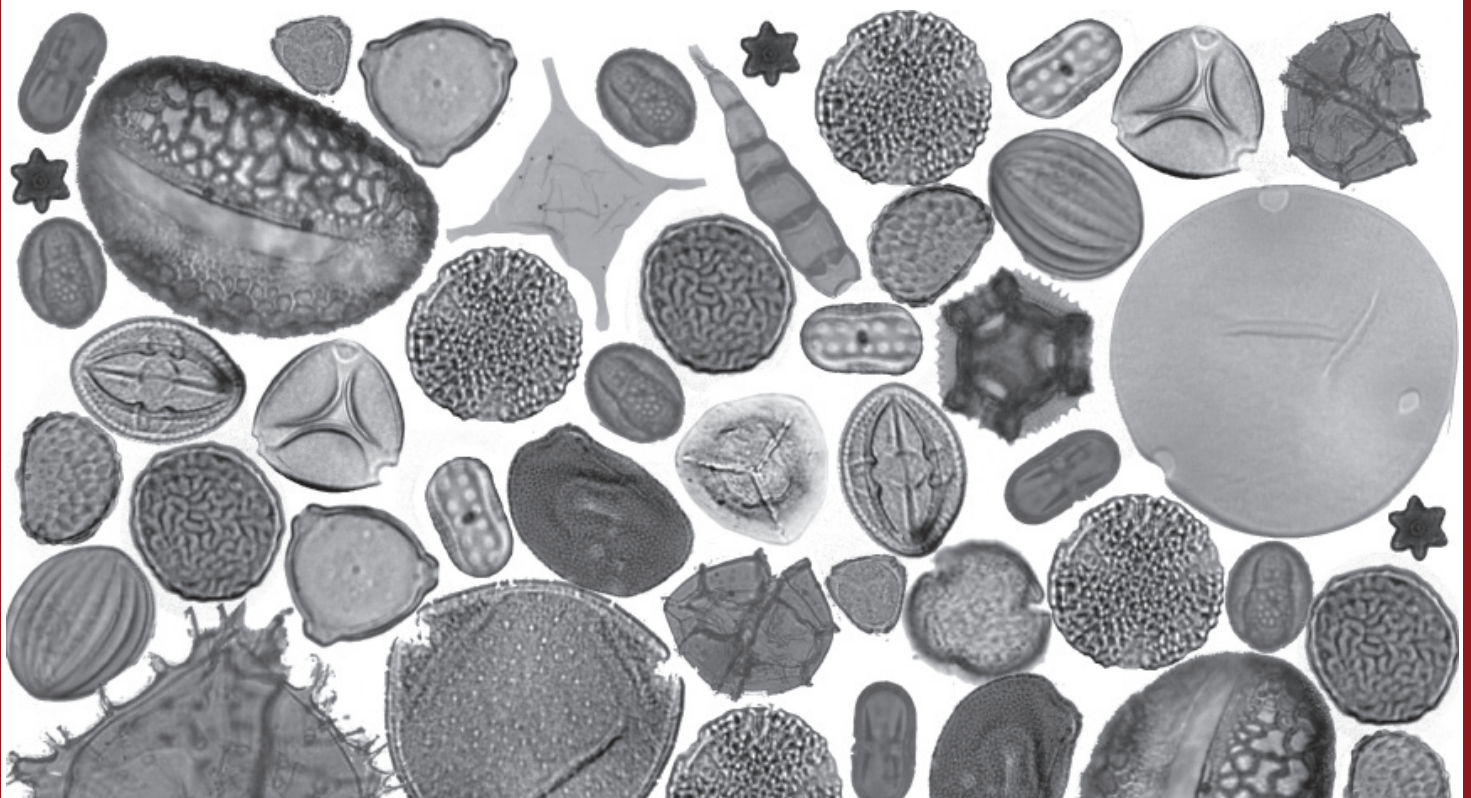
Calgary, Alberta, Canada

Organizers: Kimberley Bell & Thomas Demchuk

2019 - 52nd Annual Meeting

Ghent, Belgium

Organizers: Stephen Louwye & Thijs Vanderbrocke



51st Annual Meeting of AASP- The Palynological Society

Calgary, Alberta, Canada
August 5th - 9th, 2018



Calgary, Alberta and Canadian Rocky Mountains - Calgary Tourism

First Circular

We are pleased to announce that the 51st Annual Meeting of AASP-The Palynological Society will be held in Calgary, Alberta, Canada. Calgary is ideally located between the Canadian Rocky Mountains and the Alberta Badlands and is easily accessed by the Calgary International Airport (YYC) featuring a new state-of-the-art international terminal. Exciting field trips featuring local geology and paleontology will be offered before and after the technical program held Monday, August 6th through Wednesday, August 8th.



Badlands near Drumheller, Alberta



Stephen Avenue - Calgary Tourism

Organizing Committee:

Kimberley Bell (kmball@ucalgary.ca)

Thomas Demchuk (tdemchuk@swbell.net)

The venue for this meeting is the recently renovated Calgary Marriott Downtown Hotel boasting exceptional location, creative Canadian dining and a stylish whisky bar. The hotel is located adjacent to Stephen Avenue; a major pedestrian mall known for its restaurants, pubs, bars, cafes, shopping and entertainment venues. Public transportation, including light rapid transit, is easily accessed from the conference venue. Transportation to the hotel area from the airport is available via taxi, public transportation or airport shuttle (reservation required). A block of rooms has been secured at the Marriott at a negotiated rate of \$199 CAD/night.



XVII Argentine Symposium of Paleobotany and Palynology

TOWARDS NEW CHALLENGES

Paraná – Entre Ríos, July 30th to August 5th 2018

sapp2018@palino.com.ar

<http://fcyt.uader.edu.ar/web/sapp2018>



The IPC is organised every four years under the auspices of the International Palaeontological Association (www.ipa-assoc.org). After Sydney (Australia) in 2002, Beijing (China) in 2006, London (United Kingdom) in 2010 and Mendoza (Argentina) in 2014, it will convene in Paris (France) in 2018.



THE 5TH INTERNATIONAL PALAEOONTOLOGICAL CONGRESS

July 9th - 13th, 2018
FRANCE

THE FOSSIL WEEK

INVITATION

On behalf of the Organising Committee, we are particularly pleased to invite you to France for **the fifth edition of the International Palaeontological Congress, the IPC5.**

Under the auspices of the International Palaeontological Association (IPA) and with the participation of the whole French Palaeontological community, "the Fossil week" will be organized **in 2018 in Paris, July 9th-13th.**

This event is a unique opportunity for our community to present its new results and discuss all aspects of our discipline.

We propose here some possible symposia and sessions. Of course, the list is provisional and it is still completely open. We are waiting for your proposals.

Fieldtrips are planned before and after the congress throughout France, Belgium and Italy. They will give you the opportunity to discover our palaeontological, geological and gastronomic heritages.

We hope to welcome many of you in France in 2018.



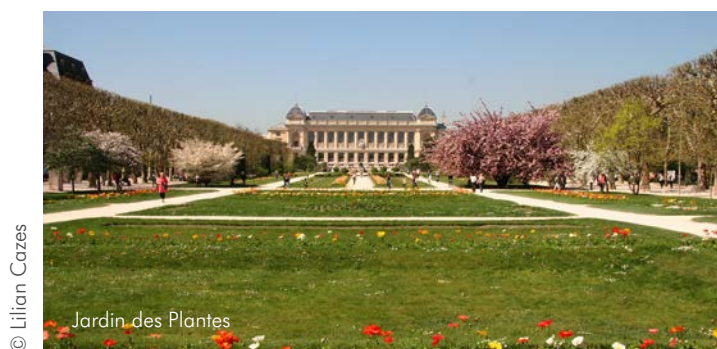
View of the Seine River and the Notre-Dame Cathedral

VENUE

The meeting will take place in the Pierre & Marie Curie University and in the National Museum of Natural History, both located in the 5th arrondissement, in the center of Paris, along the left bank of the Seine River. This district is commonly known as the *Quartier Latin* because it is where the first great Parisian university, the Sorbonne, was founded, and because Latin was the language of scholars at the time. The 5th arrondissement was also the core of Lutetia, the antique city of Paris, as revealed in a number of archaeological sites.



The most famous building of the 5th arrondissement is probably **the Pantheon**, where graves of influential French personalities are clustered, but there are many other noteworthy sights, such as the magnificent **Val-de-Grâce Church**, the intriguing **St-Etienne-du-Mont Church**, the **Cluny Museum**, the **Roman Arènes de Lutèce** and the city's botanical garden, **the Jardin des Plantes**, surrounding buildings of the National Museum of Natural History. This institution housed one of **the largest collections of natural objects of the world** with more than **68 million specimens**. The palaeontology collection itself contains between 5 and 6 million specimens.



The opening plenary session will take place in “La Maison de la Mutualité”. During its 80 years of existence, this building has hosted many historical events and welcomed prominent personalities: it is where Charlie Chaplin recorded the music for some of his movies; among world-class singers, Edith Piaf, Jacques Brel and Léo Ferré performed there.

The Fossil Week meeting will take place from the 9th to the 13th July of 2018. This will allow conveners to extend their stay to enjoy the festivities relating to the French National Day, July 14th. The weather is pleasant during summer time, with an average of 25°C (77°F).

TRANSPORTATION



Paris has daily connections with more than 526 cities in more than 136 countries via its international airports, namely Paris - Charles-de-Gaulle (23 km northwards; commuting time 45-60 minutes by city train) and Paris - Orly (14 km southwards, commuting time 30-40 min by city train).

With seven train stations in Paris itself, the city is at the heart of an exceptionally comprehensive and high-performance rail network. On a daily basis, 425 high-speed trains connect various destinations across Europe with the French capital.

French regions (Alsace, Burgundy, Brittany, Champagne, etc.) can be reached in a few hours from Paris, thanks to this well-developed transportation network and its central position in France.

Paris is equipped with top-class infrastructures and, in particular, a dense and versatile transportation network, in which the subway, bus, tramways, taxis, “vélib” (the city’s bike sharing scheme), and now the “autolib”, are interlinked.

Participants who require a support letter for visa application are invited to contact the organizing committee (congress-ipc5-contact@mnhn.fr). This letter does not imply any financial obligation on the part of the Congress organizers.

ACCOMODATION

With more than 2,000 hotels, Paris provides visitors with stylish options at all price ranges. Bed & Breakfasts, youth hostels and furnished apartment rentals complete the wide accommodation offer. Conference participants have to make their own accommodation arrangements.

RESTAURATION

Paris, known as the Capital of Gastronomy, invites travellers from all over the world to have a feast! The art of French cooking owes its success to the mastery of classic basics updated by today's chefs. The city has the second highest number of Michelin-recommended restaurants in the world. Besides notorious haute-cuisine temples, Paris is replete with informal cafés, eccentric wine bars, vintage bistros, and the new bistronomies, serving affordable modern cuisine in a casual setting. Finding baguettes of unrivalled crispness is no challenge here. All sorts of world cuisines are also well represented.

ORGANIZATION

The organizing structure is the CR2P (Centre of Research on Palaeobiodiversity and Palaeoenvironments - paleo.mnhn.fr). This laboratory is composed of lecturers and professors from the MNHN (National Museum of Natural History) and the UPMC (Pierre & Marie Curie University – Paris 6) and of researchers from the CNRS (National Scientific Research Center). Altogether, the CR2P includes 41 tenured scientists, 27 postdocs and PhD students, and 27 engineers, technicians and administrative staff. This makes it one of the largest research laboratories in the world exclusively devoted to Palaeontology. The French Geological Society (SGF) will support the congress organization.

General chair

Sylvie Crasquin

Secretary general

Angelina Bastos and Stéphane Peigné

General management

Gaël Clément, Michel Laurin, Isabelle Rouget and Brigitte Senut

Communication

Sophie Fernandez, Damien Germain, Florent Goussard and Adeline Kerner

Field trips

Ronan Allain and Patrick De Wever

Scientific chairs

Olivier Béthoux, Sylvain Charbonnier, Emmanuel Gheerbrant, Didier Merle and Annachiara Bartolini

Palaeontologists from other institutions in France (Universities of Bordeaux, Brest, Burgundy, Lille, Lyon, Montpellier, Nantes, Poitiers, Rennes, Toulouse and the regional Natural History Museums) are involved with the organization of both fieldtrips and symposia.

SCIENTIFIC COMMITTEE

Honorary scientists

Philippe Taquet	French Academy of Sciences
Philippe Janvier	French Academy of Sciences
Yves Coppens	French Academy of Sciences
Armand de Ricqlès	Pierre & Marie Curie University

International representatives

Lucia Angiolini	Milano, Italy
Marion Bamford	Johannesburg, South Africa
Spela Gorican	Ljubljana, Slovenia
David A.T. Harper	Durham, UK
Dieter Korn	Berlin, Germany
John Long	Adelaide, Australia
Rossana Martini	Geneva, Switzerland
Harufumi Nishida	Tokyo, Japan
Guntupalli V. R. Prasad	Delhi, India
Claudia V. Rubinstein	Mendoza, Argentina
Paul Sereno	Chicago, USA
Blaire Van Valkenburgh	California, Los Angeles, USA
Zhonghe Zhou	Nanjing, China

French region scientists

Pierre-Olivier Antoine	Montpellier University
Loïc Bertrand	IPANEMA, SOLEIL, Saclay
Eric Buffetaut	CNRS, ENS Paris
Bruno Maureille	CNRS, Bordeaux University
Brigitte Meyer-Berthaud	CNRS, Montpellier University
Pascal Neige	University of Burgundy
Didier Néraudeau	Rennes University
Olga Otero	Poitiers University
Thomas Servais	CNRS, Lille University
Jean Vannier	CNRS, Lyon University

Local representatives

Sylvie Crasquin	CR2P, Paris, France
Stéphane Peigné	CR2P, Paris, France

PRESENTATIONS AND LANGUAGE OF THE CONGRESS

Detailed instructions for duration of regular talks and for preparation of posters and talks will be given in the second circular.

English will be the official language of the meeting and excursions.

Abstracts: collected abstracts will be published on-line and made available on memory sticks to all participants. It is also planned to publish symposium proceedings in reputable journals.

SYMPOSIA

The Plenary opening session ceremony will take place at the Mutualité; it will include some invited talks. The scientific sessions will be organized in parallel on Pierre & Marie Curie University Campus and in the Jardin des Plantes amphitheatres. All these places are separated by less than 500 m.

Saturday July 8th	Monday July 9th	Tuesday July 10th	Wednesday July 11th	Thursday July 12th	Friday July 13th	Saturday July 14th
	Registrations Plenary opening session	Scientific sessions	Free day or Workshops; Mid-congress fieldtrips	Scientific sessions	Scientific sessions	French National Day
Registrations	Scientific sessions	Scientific sessions	Free day or Workshops; Mid-congress fieldtrips	Scientific sessions	Plenary dosing ceremony and IPA session	
		IPC5 cocktail dinatoire		Gala dinner		

Some scientific sessions have already been proposed by the French palaeontologists and are listed below. We call here for other proposals.

All the palaeontological groups have their own meetings, so please do not propose session too much focused on taxa. **The IPC is the opportunity to mix the different group approaches.**

- African Vertebrate Palaeontology
- Angiosperms, from the beginning to their diversification
- Back to the sea: from Late Palaeozoic to Cenozoic, the marine tetrapod adventure
- Biodiversity changes through times: crisis and radiations
- Biomineralisation and life
- Bird evolution
- Data, dispersals and interchanges through time: a land mammal perspective
- Databases in palaeontology: sharing knowledge for leveraging research options
- Early Life: origin, triggers and diversification
- Evolution of Indo-Pakistan biotas from the break-up of Gondwanaland (Late Jurassic) to the initiation of the collision with Eurasia (Eocene): between vicariance and dispersals
- Evolution of trees and forests
- Fossil 2D/3D imagery: approaches, advances, management
- Fossils & Recent, Molecules & Morphology: dialogs between the approaches
- Fossils and stratigraphy: an old but still dynamic symbiosis
- Intimate interactions
- Konservat-Lagerstätten
- Macroecology and the fossil record
- Microorganism evolution and interaction with biogeochemical cycles and climate
- Neogene environments
- Palaeontology and geological heritage
- Palaeozoic seas: from deep to shallow
- Practical micropalaeontology (including palynology)
- Timetrees
- XXIst Century palaeohistology of mineralized tissue.

Send your proposal to congress-ipc5-contact@mnhn.fr before May 31st, 2017.

A proposal should include

- Name of conveners
- Symposium title
- Paragraph explaining the scope and importance of the symposium

SHORT COURSES & WORKSHOPS

Some short courses and workshops will be organized during the congress. Additional information will be available in the second circular.

MID-CONGRESS EXCURSIONS

- Survey of the MNHN Collections (only through early request).
- Field trip to underground quarries at Meudon
- Guided geological walks inside Paris
- One-day visit at IPANEMA, SOLEIL synchrotron, Saint Aubin, Paris Region
- The Cenozoic of the Southern Paris Basin
- Visit of the “Centre de Recherche pour la Conservation des Collections” (MNHN)

FIELD EXCURSIONS

Paris will allow all participants to enjoy *the French art de vivre*. In addition to Paris and its vicinity, field excursions will offer the opportunity to (re)discover many aspects of **France** and of **Belgium** and **Italy**.

France is unique for the outstanding richness and importance of its fossil localities, all easily accessible, with all periods of the Phanerozoic geological time represented. Some of the earliest geological maps were produced here by Cuvier and Brongniart, and many stratotypes (Cenomanian, Givetian, Lutetian, Turonian, etc.) are located here.

Among the most famous Konservat-Lagerstätten are those of **Montceau-les-Mines** (Late Carboniferous), **La Voulte-sur-Rhône** (Middle Jurassic), and the Cenozoic sites of **Coiron** and **Sansan**. The best European Palaeocene terrestrial fossil localities are found near **Reims**. Cretaceous sites in **Charentes** provides dinosaurs as well as fossils in amber. Recently, geological reserves or geological parks were created, sometimes associated with stratotypes. Among them are **Saucats-La Brède** (Aquitanian), **Digne-les-Bains** (Barremian, Aptian), **Hettange-Grande** (Hettangian), **Pointe de Givet** (Givetian), Sainte Victoire mountain, etc. These constitute a number of attractive spots for geologists and palaeontologists.

We propose here pre- and post-congress fieldtrips.

Participants will enjoy a unique experience in palaeontological journeys that will be exquisitely combined with gastronomical, artistic or historical adventures!

© Fabrice Redois



- Anjou noir, Anjou blanc, Anjou rouge: paleontology and geology of **the Loire Valley**
4 days

- Excavations at the Early Cretaceous Dinosaur Bonebed of **Angeac-Charente**
5 days

- Geology, wine and culture: **Jura, Bourgogne and Champagne**
6 days

© Marne Tourist Office - S. Millot



- Jurassic from **Normandy**
2 days

- Jurassic from **Northern Burgundy to Lyon** area: fossils, wine and patrimonial aspects
4 days

- Le Regourdou (Dordogne)** : "the cave of the Neandertal Man who saw the bear"
2 days

© Creative Commons BY-SA



- Luberon & Haute-Provence** palaeontological sites (**Southeast France**)
5 days

- Mid-Late Palaeozoic of **western Europe** : the **Belgian Classics**
3 days

- Montceau-les-Mines Lagerstätte** (Carboniferous) and **Autunian Stratotype** (Permian)
2 days

- Permian and Mesozoic environments in **southern France**
5 days

© Global Geoparks network



- The end-Permian mass extinction and the Early Triassic biotic recovery in the Dolomites (**Southern Alps, Italy**)
4 days

- The Late Jurassic dinosaur trackways from **Jura**
5 days

SOCIAL PROGRAM

IPC5 “cocktail dinatoire” will be organized on Tuesday 10th evening in the **Great Gallery of Evolution in the National Museum of Natural History**. The Gala diner will take place on Thursday 12th evening.

© MNHN - Jacques Vekemans



REGISTRATION

The registration fees will include the Tuesday evening cocktail, the coffee breaks and the conference documents. The Gala Diner is optional; additional information and price will be in the second circular.

Refund of registrations fees will be subject to conditions. Details will be given in the next circular.

	Full registration	Students
September 1st to December 31st, 2017	360 €	200 €
From January 1st to March 31st, 2018	460 €	290 €
From April 1st, 2018 to June 30th, 2018	560 €	380 €

TRAVEL GRANTS

The organising Committee is looking for corporate and governmental sponsorships in order to get travel grants for students. Additional information to apply will be in the next circular.

Our delegates are advised to take out their **own private medical and personal insurance for the duration of the Congress and field excursions**.

IMPORTANT DATES

- Second circular: Spring 2017
- Call for symposium topics before May 31st, 2017
- Opening of registration: September 1st, 2017

contact : congress-ipc5-contact@mnhn.fr

Organisers



Administrative supervision



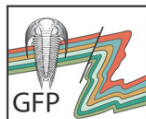
MUSÉUM
NATIONAL D'HISTOIRE NATURELLE



UPMC
SORBONNE UNIVERSITÉS

SORBONNE
UNIVERSITÉS

Partners



MUSÉUM
D'HISTOIRE
NATURELLE
de Toulon et du Var





10TH EUROPEAN PALAEOBOTANY & PALYNOLOGY CONFERENCE



University College Dublin, Ireland
12th-17th August 2018

Welcome Reception: Guinness Storehouse Sunday 12th

Conference Dinner: The Banking Hall, Westin Dublin Hotel Thursday 16th

Scientific Sessions: O'Brien Centre for Science, UCD 13th-17th

Partners: Trinity College Dublin; National Museum of Ireland; National Botanic Gardens of Ireland

EPPC2018@ucd.ie



10TH EUROPEAN PALAEOBOTANY & PALYNOLOGY CONFERENCE, DUBLIN 2018.



Quaternary Research in Ireland and the Irish Quaternary Association (IQUA)

Ireland's famously beautiful landscape contains a wealth of evidence for a dynamic Quaternary history. With dramatic glacial landforms, varied coastlines, extensive peatlands, innumerable lakes, and a rich archaeological heritage, the island has long fascinated Quaternary scientists. Indeed, Ireland has a history of Quaternary research dating back to the nineteenth century, including famous visits by Agassiz in 1840 and Carvill Lewis in 1885, and its diverse Quaternary archives continue to provide fruitful avenues for research.



Life on the Edge

XX INQUA Congress 2019

25th – 31st July 2019
Dublin, Ireland



Meet in
Ireland
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The Royal Irish Academy (RIA) 'Committee for Quaternary Research in Ireland' was established in 1934, providing a key stimulus for the study of Ireland's Quaternary history. In the 1970s, the Irish Quaternary Association (IQUA) was founded with a view to co-ordinating and energising all aspects of Quaternary research in Ireland and passing on existing expertise through conferences and especially field excursions. Notable contributors over the lifetime of the Association include Frank Mitchell, Francis Synge, Alan Smith, Bill Watts, Marshall McCabe and Willie Warren. The INQUA Congress held in Birmingham in 1977, which included excursions to Ireland led by Watts and Synge, gave a further impetus to Quaternary studies in Ireland. Frank Mitchell, as President of INQUA for the intercongress period 1969–1973, and later through his classic book, *Reading the Irish Landscape*, also greatly helped in highlighting the multi-dimensional character of the Quaternary record in Ireland.

Currently, IQUA is a thriving organisation with well over 100 members, and disseminates information about its activities through its webpage (www.inqua.ie) and email list. The link between the RIA and INQUA continues to be positively fostered by active Quaternary scientists represented via the RIA's Geoscience Committee (formerly the National Committee for Geology), and by funding IQUA's national delegates to attend INQUA congresses. Furthermore, the recipient of IQUA's inaugural Frank Mitchell Award for Distinguished Service to Quaternary Research and Teaching, Pete Coxon, has served as both IQUA President (2008–2012) and as Secretary-General of INQUA (2003–2011), thus strengthening the link between IQUA and INQUA.

The following links will give you a sample of the Congress facilities and Ireland's Quaternary science community and landscape:

The Irish Quaternary Association (IQUA): <http://www.inqua.ie>

IQUA Field Excursions: <http://www.inqua.ie/publications.html>

The Convention Centre Dublin (the Congress Venue): <http://www.theccd.ie>

Wild Atlantic Way (Ireland's scenery): <http://www.wildatlanticway.com/home/>

Sign up for Congress Newsletters: www.inqua2019.org

