AASP-
THE
PALYNOLOGICAL
SOCIETY

Polygala incarnata
by Gretchen Jones

NEWSLETTER

June 2013
Volume 46, Number 2

Published Quarterly by AASP — The Palynological Society

AASP-TPS NEWSLETTER

Published Quarterly by AASP - The Palynological Society

June 2013
Volume 46, Number 2

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 (biannually), 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)

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 Aureal T. Cross (elected 1991)
Dr. Robert T. Clarke (awarded 2002)
Professor Vaughn Bryant (awarded 2005)
Professor Alfred Traverse (awarded 2005)

AASP Board of Directors Award recipient
Dr. Robert T. Clarke (awarded 1994)

Teaching medal recipients
Professor Aureal T. Cross (awarded 1999)
Professor Alfred Traverse (awarded 2001)
Professor Bill Evitt (awarded 2006)

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)

AASP-TPS NEWSLETTER

Published Quarterly by AASP - The Palynological Society

June 2013
ISSN 0732-6041

Volume 46, Number 2
Sophie Warny, Editor

AASP BOOK REVIEW EDITOR
Reed Wicander, reed.wicander@cmich.edu

AASP WEBMASTER
Mohamed Zobaa, mohamed.zobaa@fsc.bu.edu.eg, website: http://www.palynology.org

AASP NEWSLETTER EDITOR
Sophie Warny, swarny@lsu.edu, Department of Geology and Geophysics & Museum of Natural Science, Louisiana State University, E235 Howe Russell Geoscience Complex, Baton Rouge, LA 70803, USA.

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 **AUGUST 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 the president

Be sure to wear some flowers in your hair...

Ah, jet-lag and the usual delights of the English weather have greeted my return from the AASP-TPS Mid-yearly Board Meeting in San Francisco (from a breezy 21ºC/70ºF to a cloudy 7ºC/45ºF!). However, I'm delighted to report that those Board members who flew in and those who joined us by Skype had a most productive meeting, those of us there in person stayed at the venue for our Annual Meeting, the Hotel Whitcomb, built in a very grand style just after the earthquake of 1906. Our local team of organisers, led by President-elect Lanny Fisk and past-President Joyce Lucas-Clark have really gone to town in organising what promises to be another excellent Annual Meeting in a city of unique character. Despite what some may think, I'm actually not old enough to remember the Summer of Love when people were turning on, tuning in and dropping out in the city's Haight-Ashbury neighbourhood, but a bohemian atmosphere still pervades the place even some 46 years on….

The venue for the meeting couldn't be easier to reach from the airport, having BART subway and MUNI bus stops right outside the door, and will provide a variety of rooms for different symposia. The meeting will of course be held jointly with DINO10, CAP, CIMP, and NAMS, so there promises to be something for everyone, whatever your 'flavour' of palynology. The hotel is situated adjacent to the National Historic Landmark of the Civic Center, which comprises the City Hall, the War Memorial Veterans Building›s Herbst Theatre (where in 1945 The United Nations Charter was signed), the Symphony Hall and Opera House, and the Asian Art Museum, amongst other venues. The conference dinner promises to be something very special, as, weather permitting, we will be cruising the Bay aboard the Sunset Hornblower. The pre- and post-conference trips that are planned will offer a variety of delights from local geology and palaeontology – and will more than satiate the oenophiles amongst you…. We hope that the coming together of several societies and conference series in such a fascinating city will see one of the largest Annual Meetings for some years.

Raising awareness: the announcement of a new series of awards

You might just have spotted a recurring theme in the President's Letters I've penned during my tenure: one of the things that I am passionate about is raising awareness of our science amongst students. To this end, one of the items that I tabled for discussion at the Incoming Board Meeting in Lexington was approved at this Mid-Yearly Meeting, namely the creation of a new award to heighten the profile of our Society, and intended to encourage and reward undergraduate student engagement and achievement in palynology. These awards are to be known as the *AASP-TPS Undergraduate Student Awards (you can never accuse the Board of lacking imagination!).*

This new series of awards are specifically designed to reward undergraduate academic attainment in taught modules/courses which contain a significant palynological content, and are modelled on the student awards I helped to establish for The Micropalaeontological Society in 2008 (www.tmsoc.org/studentawards.htm). The intent behind the establishment of these new AASP-TPS awards is to develop a wider awareness in the undergraduate community of palynology in all its many guises, to encourage students to experience the benefits of being part of a wider palynological research community, and to encourage them to take their studies in the subject to post-graduate level, thus helping to perpetuate the study of the subject area.

The nature of the award

The recipients of this new award will each receive of one year's free membership in the AASP-TPS, including two issues of Palynology and access to digital versions of the Newsletters, discounts on AASP publications, discounted registration fees at AASP meetings, and eligibility for other AASP awards. The Society will thus be able to provide a series of these awards each year without any significant financial outlay, and should reap the reward that goes with

Background image: The Golden Gate Bridge in San Francisco, photo Ian Harding.

the publicity surrounding the availability and bestowal of awards. Whilst the awards will not provide a tangible financial benefit to the recipient, the winners will of course have the prestige of being able to list the award on their CVs.

How the awards will operate

The awards will be bestowed annually, and specifically by instructor(s)/faculty member(s) coordinating undergraduate level courses/modules which contain a significant element of palynological teaching. Only one award will be made per year per institution (fewer if approved courses do not run every year). For courses to qualify for the award, they will need to be nominated by the person(s) responsible for teaching them, and who must be members of AASP-TPS. The faculty members will be asked to provide a brief description of the course which will be made available on the AASP-TPS website. The faculty members will also be asked to provide an indication of the criteria by which the annual recipient of their institution's award will be selected, but should be someone deemed to have achieved meritorious grades in some form or other. After assessment of these details, the AASP-TPS Awards Committee would confirm in writing that the given course is approved for the award, and a list of approved courses will also be made available on the AASP-TPS website.
Faculty members of approved courses would then report the name of each awardee to the Awards Committee, who will arrange for the awardees to be added to the Society's list of members for a period of 12 months. The Awards Committee will then collate a list of awardees to be reported each year at the Annual Meeting and to be publicised in the Newsletter.

The proposed mechanism for the bestowing of the awards is thus simple to administer, as it only requires the Awards Committee to approve the content of a given course, and then the onus transfers to the faculty member(s)/tutor(s) running that course to nominate candidates for the award.

The Board hopes that the creation of this new award will receive members' strong support, and would actively encourage those of you delivering undergraduate courses with a palynological content to provide us with the course description details in order that the first of these awards can be granted for the next academic year (i.e., 2013-14).

If you're going to San Francisco…

So, go and grab your kaftans, headbands and John Lennon sunglasses - and encourage any students you may have to grab theirs too! – and we hope to see hordes of you in San Francisco in October. But before you ask, don't expect me to be wearing any flowers in my hair, regrettably there is not enough of the latter left!

Peace, baby…

Ian Harding

Above: Tramway system in San Francisco, photo Ian Harding.
Left: Haight-Ashbury neighborhood, photo David Jarzen.

Palynology Managing Editor's Report

Volume 37 of *Palynology* (for 2013) will have a (really very nice!) dark green cover; the featured palynomorph is the fossil hornwort spore *Anthoceros multifidus* which was supplied by Sophie Warny. I intend to use a chitinozoan on the cover of Volume 38; if you have a photogenic SEM photograph of a stunning chitinozoan, please send it to me.

As I write this report, Part 1 of Volume 37(dated June 2013) has just gone to the printers. This part will be ca. 175 pages and includes 11 articles, which are listed below. All of these were already available online. This part will most probably be distributed during May 2013 to all paid-up members.

We have enough copy for Part 2 of Volume 37, which will be paper-published in early December 2013. Three articles which have been finalised are listed below, and are available online. This part should comprise 12 original articles. Proofs of several other articles for this part are being reviewed as I write.

We have several other articles currently going through the editorial process, so I am optimistic about Volume 38 (2014). Manuscript submission rates continue to be reasonably healthy.

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

Papers to be published in *Palynology* Volume 37, Part 1 (June 2013)

1 Srivastava, S.K. and Braman, D.R. The palynostratigraphy of the Edmonton Group (Upper Cretaceous) of Alberta, Canada.

2 Aguilera, F. and Ruiz Valenzuela, L. Time trend in the viability of pollen grains in the 'Picual' olive (*Olea europaea* L.) cultivar.

3 Soliman, A., Feist-Burkhardt, S., Harzhauser, M., Kern, A.K. and Piller, W.E. *Mendicodinium mataschenensis*, a new endemic dinoflagellate cyst from the Late Miocene (Tortonian) of Lake Pannon, Austria.

4 Lindström, S. A review of the enigmatic microalga *Tetranguladinium* Yu et al. 1983 ex Chen et al. 1988; palaeoecology, stratigraphy and palaeogeographical distribution.

5 Candel, M.S., Borromei, A.M., Martínez, M.A. and Bujalesky, G. Palynofacies analysis of surface sediments from the Beagle Channel and its application as modern analogues for Holocene records of Tierra del Fuego, Argentina.

6 de Jersey, N.J. and McKellar, J.L. The palynology of the Triassic-Jurassic transition in southeastern Queensland, Australia, and correlation with New Zealand.

7 Langgut, D., Gadot, Y., Porat, N. and Lipschits, O. Fossil pollen reveals the secrets of Royal Persian Garden at Ramat Rahel (Jerusalem).

8 Buosi, C., Pittau, P., Del Rio, M., Mureddu, D. and Locci, M.C. A palynological investigation of funerary urn contents in a Roman Imperial age necropolis from Sardinia, Italy.

9 Caffrey, M.A. and Horn, S.P. The use of lithium heteropolytungstate in the heavy liquid separation of samples which are sparse in pollen.

10 Bowman, V.C., Riding, J.B., Francis, J.E., Crame, J.A. and Hannah, M.J. The taxonomy and palaeobiogeography of small chorate dinoflagellate cysts from the Late Cretaceous to Quaternary of Antarctica.

11. Jones, G.D. and Allen, K.C. Pollen analyses of tarnished plant bugs.

Three papers to be published in *Palynology* Volume 37, Part 2 (December 2013)

1. Via do Pico, G.M. and Dematteis, M. Pollen morphology and implications for the taxonomy of the genus *Chrysolaena* (Vernonieae, Asteraceae).

2. Ahmad, M., Bano, A., Zafar, M., Khan, M.A., Chaudhry, M.J.I. and Sultana, S. Pollen morphology of some species of the Family Asteraceae from the Alpine Zone, Deosai Plateau, northern Pakistan.

3. Rooney, A., Clayton, G. and Goodhue, R. The dispersed spore *Retusotriletes loboziakii* sp. nov., affiliated with the enigmatic Late Devonian alga *Protosalvinia* Dawson 1884.

A REMINDER...
IMPORTANT BY-LAW CHANGE

The following changes to the by-laws are recommended by the Board in order to accommodate the addition of a new position, Student Member, which has been recommended by the Board. The recommended changes/additions to the text of the by-laws are indicated below in boldface type.

The original text reads:
"4.02 The number of Directors shall be eleven.…"
The revised text reads:
"4.02 The number of Directors shall be **twelve (12)**,…"

The original text reads:
"5.01 The officers of the corporation shall be a President, President-Elect, Past-President, Secretary-Treasurer, Managing Editor, Webmaster, Newsletter Editor, and four (4) Directors-at-Large, all ten (10) of whom shall be members of and constitute the Board of Directors."

The revised text reads:
"5.01 The officers of the corporation shall be a President, President-Elect, Past-President, Secretary-Treasurer, Managing Editor, Webmaster, Newsletter Editor, **a student member,** and four (4) Directors-at-Large, all **twelve (12)** of whom shall be members of and constitute the Board of Directors."

The original text reads:
"5.02 …The Secretary-Treasurer, Managing Editor and Webmaster may succeed themselves in office."

The revised text reads:
"5.02 …The Secretary-Treasurer, Managing Editor, Webmaster, **Newsletter Editor** and **Student Member** may succeed themselves in office."

The following new text is recommended for insertion to follow Section 5.11:

Student Member

5.12 A Student Member of the Board shall be elected each year and serve a one year term as a voting member of the Board. The Student Member must be enrolled in a degree program at a college or university as of the first day of January in the election year. The Student Member may serve up to three (3) consecutive terms on the Board.

Note:
A ballot will follow later for you to record your objections or approval of these proposed changes.

AASP-TPS MID YEAR MEETING

In preparation for the annual meeting, the AASP-TPS Society Board met at the Whitcomb hotel in San Francisco to organize the meeting and vote on key issues. Pictured are clock-wise S. Warny, T. Demchuk, L. Fisk, I. Harding, F. Oboh-Ikuenobe. Not pictured J. Lucas-Clark. Present via skype M. Zobaa and J. O'Keefe.

NEW: The Vaughn Bryant Student Poster Award AWARD!

During its midyear meeting in San Francisco on May 11, 2013, the AASP-TPS Board of Directors approved a motion tabled by Past-President Francisca Oboh-Ikuenobe to formally name the annual meeting student poster award the "Vaughn Bryant Student Poster Award" in recognition of Prof. Bryant's long tenure of the faculty of Texas A&M and contributions to the mission of AASP-TPS and its Foundation.

Lets make the

2013

AASP-TPS meeting memorable!

REGISTER TODAY!

46th Annual Meeting
AASP – The Palynological Society
San Francisco, U.S.A.
October 20-24, 2013

Photo UCSF

Photo Wiki Commons

46th Annual Meeting
AASP – The Palynological Society
San Francisco, U.S.A.

♫ Are You Going to San Francisco? ♫
Be Sure to Wear Some Flowers in Your Hair

Please feel free to either sing or hum along. It has been said (albeit without statistical support) that there have been more songs written about San Francisco than about any other city in the world. Think of the classics: "We built this city (on rock and roll)" by Jefferson Starship, "When the lights go down in the city" by Journey, "Sitting on the dock of the bay" by Otis Redding, "Little boxes on the hillsides" by Pete Seeger, and "Are you going to San Francisco?" by Scott McKenzie. Well, are you going to San Francisco?

San Francisco is a magical place, a place to dream about, a place everyone should visit at least once in their lifetime. And now you have a reason – an excuse if you wish – an opportunity really to visit the "City by the Bay", maybe waste a little time sitting on a dock, and possibly write off the whole trip as a business expense!

The 46th annual meeting of AASP – The Palynological Society (AASP-TPS), meeting jointly with Dino10, the Canadian Association of Palynologists, and the North American Micropaleontology Section of SEPM, will be held literally in the heart of San Francisco at the Hotel Whitcomb only one block from the brass plaque that reads "Heart of San Francisco"! You do not want to miss this opportunity to visit "The City" – "The City by the Bay".

San Francisco is a fabled tourist destination recognized worldwide with such major attractions as the Golden Gate Bridge, Alcatraz Island, Fisherman's Wharf, Haight-Ashbury, cable cars, beautiful beaches, redwood forests, Napa Valley wine country, Silicon Valley, Berkeley, etc., etc. These hugely popular features attract visitors and their families from around the world to vacation in the "Bay Area".

To take advantage of the excellent weather during early Fall, the meeting is scheduled for 20-24 October 2013 – 30 years to the week after the 16th annual meeting held in SF in 1983. If you don't think that you can wait another 30 years for a reason to come to San Francisco, you better come this year! The tentative schedule calls for:

AGENDA

Sunday 20 October – pre-meeting field trip to Napa Valley, Calistoga Petrified Forest, Muir Redwoods, Golden Gate Bridge, etc. Evening Ice-Breaker/Welcoming Reception at the Hotel Whitcomb.

Monday 21 October – presentations/posters in the conference hotel. Walking tour of the San Francisco sights for spouses/guests. Evening Conference Dinner aboard a pleasure ship cruising San Francisco Bay.

Tuesday 22 October – presentations/posters in the conference hotel. Noon Business Luncheon at the conference hotel. Evening free.

Wednesday 23 October – presentations/posters in the conference hotel. Paleoclimate Symposium.

Thursday 24 October – post-meeting field trip from SF to either Sierra Nevada or Santa Cruz.

When you come to "The City by the Bay", in memory of the '60s "Be sure to wear flowers in your hair". (Are you still singing?) But be forewarned that what happens in Las Vegas may stay in Las Vegas, but what happens in San Francisco stays on YouTube!! Whatever happens during your stay in San Francisco, we can promise you one thing. When you leave the meeting, you will be singing "I left my heart in San Francisco" by Tony Bennett.

Questions or Suggestions? Contact Co-Chairpersons Lanny H. Fisk (Lanny@PaleoResource.com) or Joyce Lucas-Clark (jluclark@comcast.net)

Call for Abstracts (again)

It's still early, but it's later than you think.

The Organizing Committee for **San Francisco 2013** – a joint meeting of AASP-TPS, Dino10, CAP, CIMP, and NAMS – invite you to submit an abstract for the conference to be held 20–23 October 2013 at the Hotel Whitcomb in downtown San Francisco, California.

The conference will offer a three-day, dual-track technical program featuring both oral and poster sessions on all aspects of palynology – both fossil and modern, dinoflagellates / pollen / spores, *plus* other microfossils as proxies for paleoclimate interpretations. Research results from studies concentrating on any portion of the fossil record are welcome – as are studies on any aspect of modern pollen, spores, and/or dinoflagellates. In addition to specialized sessions, symposia, and workshops, there will be sessions devoted to "General Palynology". If you call yourself a palynologists (or anything close), your presentation will no doubt fit into one of the planned sessions. And, if not, we'll plan a new session that *will* include your research.

As a speaker or poster presenter at **San Francisco 2013**, you will have the opportunity to engage in live, real-world discourse with your fellow presenters and attendees concerning your research. This is your chance to present your latest research to the top experts and professionals in palynology and possibly get some help with identifications or interpretations from the international community. This may also be your chance to meet potential research advisors, future research collaborators, or even potential future employers!

Presentation Format: We invite abstracts for either poster or oral presentations. When you submit your abstract(s), you will be asked whether you would prefer to present your research orally, as a poster, or either. Session organizers would like to maximize flexibility by communicating with presenters and requesting that your presentation be moved from poster to oral (if we need a talk to fill out a session) or moved from oral to poster (if we have too many oral presentations for a session).

Abstract Format: Please format your abstract following the guidelines for the AASP-TPS journal *Palynology* (see a recent issue of the journal or visit www.tandfonline.com/tpal for the style guide).

Abstract Submission: Actual abstract submission will be via the AASP-TPS website www.palynology.org. More detailed instructions are available elsewhere in this Newsletter and on the website. If you have any difficulties at all uploading your abstract file, you can contact either or both of the meeting co-chairs listed below.

Abstract Submission Deadline: Deadline for all abstracts is **Saturday 07 September 2013**. For those authors making presentations as part of a special session, symposium, or workshop (see information elsewhere in this Newsletter), please plan to submit your abstract *early* to the convener(s) for their approval. We look forward to receiving your abstract submissions…sooner rather than later.

Inquiries: Contact either **Lanny H. Fisk** (Lanny@PaleoResource.com or toll free at +1 (888) 887-9745) *OR* **Joyce Lucas-Clark** (jluclark@comcast.net).

Abstract Submission Instructions (by M. Zobaa)

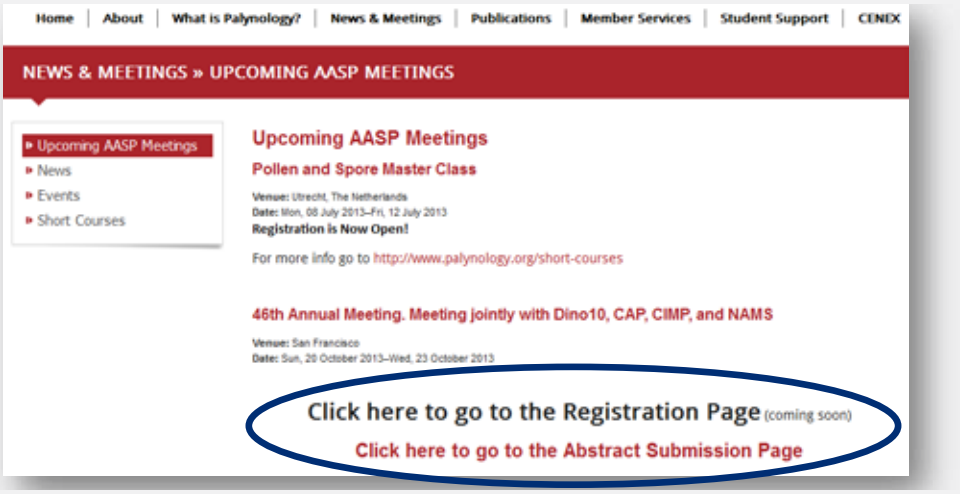
AASP-The Palynological Society 46th Annual Meeting

Meeting jointly with Dino10, CAP, CIMP, and NAMS, San Francisco, California, USA

1- Go to the AASP-TPS homepage (http://www.palynology.org)
2- Click on the "News & Meetings" tab

3- On the "News & Meetings" page, click on the link "Click here to go to the Registration Page"
4- Complete the registration form and submit payment. Only registered persons are allowed to submit abstracts.

5- Return to the “News & Meetings” page, click on the link “Click here to go to the Abstract Submission Page”



6- On the “Abstract Submission Page”, fill-in your first and last names, affiliation, mailing address, phone number, email address, etc., and choose the abstract file to upload

Please note the following:

- The Abstract Format should follow the guidelines for the AASP-TPS journal Palynology (see a recent issue of the journal, the Abstract Guidelines, OR the style guide at www.tandfonline.com/tpal)
- Deadline to submit your abstract is Saturday, September 7th, 2013
- Accepted file formats are doc, docx, txt, pdf, and rtf
- File size cannot be larger than 2MB
- When uploading your file, Click the “Submit” button only ONCE and don’t Refresh or press the “Back” or “Forward” buttons of your browser, as this may result in multiple uploads in your name
- If you have any difficulties submitting your abstract(s) or have a question about the conference, please contact either or both of the meeting co-chairs Lanny H. Fisk (Lanny@PaleoResource.com or toll free at +1 (888) 887-9745) and/or Joyce Lucas-Clark (jluclark@comcast.net)

We look forward to receiving your abstract(s) submissions.

To help make the meeting affordable for students, please consider donating. All donations are tax-decuctible!

San Francisco, 20-24 October 2013

AASP-TPS, Dino10, CAP, and NAMS

Sponsorship Opportunities

$5,000 (Platinum Level)

- Recognition of Platinum Level sponsorship on conference promotional materials and website.
- Special recognition as the sponsor of five students attending the conference.
- Opportunity to have a booth in conference lobby and products available at the meeting.
- Five free tickets for conference dinner cruise and business luncheon.
- Full-page display ad in the conference program.

$3,000 (Gold Level)

- Recognition of Gold Level sponsorship on conference promotional materials and website
- Special recognition as the sponsor of three students attending the conference.
- Opportunity to have a booth in conference lobby and products available at the meeting.
- Three free tickets for conference dinner cruise and business luncheon.
- Half-page display ad in the conference program.

$1,000 (Silver Level)

- Recognition of Silver Level sponsorship on conference promotional materials and website.
- Special recognition as the sponsor of one student attending the conference.
- Opportunity to have a booth in conference lobby and products available at the meeting.
- One free ticket for conference dinner cruise and business luncheon.
- Quarter-page display ad in conference program.

$500 (Bronze Level)

- Recognition of Bronze Level sponsorship on conference promotional materials and website.
- Special recognition as a sponsor of either a mid-morning or mid-afternoon coffee/tea break.
- Opportunity to have a booth in conference lobby and products available at the meeting.
- One free ticket for business luncheon.
- Business card display ad in conference program.

For other levels of sponsorship, please contact Lanny Fisk (lanny@paleoresource.com) or Irina Delusina (idelusina@ucdavis.edu)

San Francisco Registration Fees

Full Meeting, Professional Member	$190 by 01 October $240 late/on-site
Full Meeting, Professional Non-Member	$240 by 01 October $290 late/on-site
Full Meeting, Student	$90 by 01 October $100 late/on site
One Day, Professional Member	$100 by 01 October $120 late/on site
One Day, Professional Non-Member	$120 by 01 October $140 late/on site
One Day, Student	$50 by 01 October $60 late/on-site
Guest Registration, Full Meeting	$50 by 01 October $60 late/on-site
Dinner Cruise around SF Bay	$95
Business Luncheon	$45
Workshop on Palynological Databases (2 days)	$60
Workshop on Dinocysts as Proxies (half day)	$30
Workshop on TimeScale Creator/Palynostrat (half day)	$30
Pre-meeting field trip to Napa Valley, plus	$80
Post-meeting field trip to Sierra Gold Country	$120
Post-meeting field trip along Pacific Coast	$80

Tweet it out!

Here is your mission should you choose to accept it: tweet out to anyone potentially interested that the 2013 46th annual meeting of AASP-The Palynological Society, meeting jointly with Dino10, CAP, CIMP, and NAMS, will be in downtown San Francisco, California, USA, from 20-23 October. In memory of the '60s, the theme of the meeting is

"Peace, Love, and Palynology"

Use tweets and other social media (Twitter, Facebook, Instagram, Flickr, Reddit, Pinterest, Second Life, Latitude, Foursquare, forums, blogs, chats, etc.) to get the word out. Be the first to start a thread that goes round the world and throughout the social media network. Refer anyone interested in the meeting to our website at www.palynology.org.

Hotel Whitcomb

Historical Building as the Venue for Our 2013 Annual Meeting

INSTRUCTIONS ON HOW TO RESERVE THE HOTEL FOR THE 2013 SAN FRANCISCO MEETING

A large block of rooms has been reserved at the conference hotel, including a variety of comfortable, affordable individual rooms with a queen-sized bed and rooms with two double-sized beds. The hotel has guaranteed us the lowest rate available, not to exceed $159/room/night vs. regular rates of $249 to $489/room/night. You will not need to search the internet (Expedia, Travelocity, Orbitz, etc.) for the lowest rate; **you are already guaranteed the lowest rate available, period**! End of search! Of course, for a few hundred dollars more per night, you and your partner may wish to stay in the Marilyn Monroe Suite or the Governor's Penthouse Suite. The AASP Group Rate applies only to standard Queen and standard Double/Double rooms, and not to Superior Queen, King, Superior King, Superior Double/Double, or King Parlor Suites. The room rates on these larger rooms will be as posted on the hotel's reservation page.

To make your reservations all you need to do is go to the Hotel Whitcomb website at **www.Hotel-Whitcomb.com**/. Once on the Hotel Whitcomb main page, click on "Book Online" and then on the reservation form put into the "Additional Requests" box "AASP Convention Group Rate". The Hotel reservation page will not have the AASP group rate listed as an option. So simply choose either a standard Queen or standard Double/Double room, and disregard the price listed. If you put "AASP Convention Group Rate" in the "Additional Requests" box at the bottom of the reservation form, you will be guaranteed to receive the group rate ($159/nite plus tax or the lowest rate available online). If you have any difficulties at all with this procedure, please feel free to call the Hotel Whitcomb reservation desk at 415-626-8000.

The Hotel Whitcomb was built immediately following the 1906 earthquake that devastated SF. Seeing its elegance and location in the heart of the city, the city fathers rented the entire hotel as City Hall from its completion in 1912 until 1915. In fact, the original city jail is still in the basement and can function to hold any unruly or disorderly guests who get out of line during our meeting. From its grand opening in 1916 until the 1960s, Hotel Whitcomb was THE hotel of choice for the rich and famous who visited SF, with such honored guests as Marilyn Monroe, Joe DiMaggio, Frank Sinatra, etc. The hotel's luxury was most visible in its Austrian crystal chandeliers, Tiffany glass, Janesero wood paneling, and polished Italian marble. The Hotel Whitcomb was truly the place to see and to be seen.

Through the years, the Hotel Whitcomb has been "modernized" numerous times, most recently in 2011. Before you arrive, it will have undergone yet another "renovation" and "upgrading" with 42-inch, flat-screen TVs in every room. With each renovation, the hotel has maintained its level of elegance, while remaining true to its architectural heritage.

San Francisco (SF) is located on beautiful San Francisco Bay in coastal central California on the west coast (some would say the far left coast) of the United States. SF is a fabled tourist destination recognized worldwide with such major attractions as the Golden Gate Bridge, Alcatraz Island, cable cars, beautiful beaches, redwood forests, Napa Valley wine country, etc., etc. These hugely popular features should help attract palynologists and their families from around the world to visit and maybe spend a few extra days vacationing in the Bay Area.

To take advantage of the excellent weather during early Fall, the meeting is scheduled for 20-24 October 2013 – 30 years to the week after the 16th annual meeting held in SF in 1983.

SUMMARY OF IMPORTANT WEB LINKS FOR THE ANNUAL MEETING:

1- Main meeting page (http://www.palynology.org/upcoming-aasp-meetings/22)

2- Registration Page (http://www.palynology.org/aasp-store/8)

3- Abstract Submission Page (http://www.palynology.org/events/upload/22)

DINO 10 is happenin' in San Francisco

October 20-24, 2013
As a Joint Meeting with AASP-TPS, CAP, NAMS AND CIMP at the Hotel Whitcomb in the Heart of San Francisco.

Details, Registration, and Abstract submission on the AASP-TSP website www.palynology.org

Workshops of interest:1) Dinocyst assemblages as proxy of sea surface conditions: towards quantitative approaches in late Cenozoic paleooceanography; 2) Taxonomy and Morphology of Dinoflagellates; Computer applications to Palynology.

Symposium: Fossil and Living Dinoflagellates: a Tribute to the Work of Bill Evitt.

Abstract Deadline is September 7, 2013!

Organizing Committee: Joyce Lucas-Clark (jluclark@comcast.net); (510-792-2381);Vera Pospelova (vpospe@uvic.ca)

Field Trip Descriptions

The San Francisco 2013 meeting in San Francisco provides the opportunity for multiple field trips to areas of interest. One pre-conference field trip and two post-conference field trips are planned.

1. Pre-Conference Napa Valley Field Trip – Sunday 20 October

This field trip will provide participants with an overview of the geology, paleontology, vegetation, climate, soils and their relationship to wines produced in the Napa Valley. During the trip we will tour three wineries and take time to do some tasting of wines from different parts of the valley. This trip will also include a visit to Calistoga Petrified Forest with the first report on palynology of the middle Pliocene Sonoma Volcanics that entomb its giant redwood logs. Next we will visit a possible modern equivalent to the Petrified Forest and other Neogene fossil plant localities, the coast redwood forest at Muir Woods National Monument and discuss the modern pollen and spore flora of Muir Creek in comparison to Neogene fossil leaf floras, such as the Bridge Creek Flora in central Oregon. Finally, we will examine the geology of Marin Headlands at the north entrance to the Golden Gate Bridge, with hopefully a clear, scenic, and photogenic view of the entire bridge with the City of San Francisco in the background. Our goal on this fieldtrip is to get merely a taste of the Napa Valley and other areas. We know if you do, you will want to come back to visit again and again.

2. Post-Conference Sierra Nevada Gold Country Field Trip – Thursday 24 October

The Gold Country Field Trip will take us first to the Sierra College Museum of Natural History to see a fine display of fossils. Then we will visit two Eocene (?) Chalk Bluffs Flora sites, at least one of which will allow us to collect plant fossils and palynology samples. The Chalk Bluffs plant fossils were described by Harry MacGinitie in 1951. Later Estella Leopold studied the palynoflora and published a short description and illustration in Tschudy and Scott (1969 p.356). The palynoflora is currently under study by field-trip leaders. Presently there exists a controversy over the age of the flora, with some recent radiometric dates indicating an Oligocene age. Additionally, we will stop at a local winery (The Sierra is famous for its red Zinfandel) and at the Sixteen-to-One gold mine, with its visible gold in white quartz, often used for jewelry. Then before heading back to San Francisco, we will have California Cuisine at a restaurant in Nevada City with entertainment provided.

3. Post-Conference Coastal Field Trip – Thursday 24 October (concurrent with trip 2 above)

The Coastal Field Trip will explore the geology, paleontology, and vegetation of the central California coast from San Francisco south to Santa Cruz (see picture to the left, by S. Warny). In addition to scenic Pacific Ocean beaches, we will see seacliffs with exposures of primarily Neogene and Quaternary sediments containing abundant fossils. We will start the trip with picturesque stops near the south headlands of the Golden Gate Bridge within the City of San Francisco. As we proceed south we will make stops at Fitzgerald Marine Preserve near Half Moon Bay to examine well exposed strata of Mio-Pliocene Purisima Formation containing abundant marine fossils. From here we will continue south along the coast observing the exposed geology and vegetation, including some of the southernmost coast redwood forests. Finally, in the vicinity of Santa Cruz we will examine a series of Pleistocene marine terraces and high seacliffs exposing Purisima Formation overlain by Pleistocene terrace deposits. Field trip leaders are currently studying the palynoflora (pollen, spores, *and* dinoflagellates) from both the Purisima Formation and overlying Pleistocene terrace deposits from this locality and will discuss the study results. From Santa Cruz we will return to San Francisco via a different route than got us here. Oh yes, if there is time, we will make a short stop for wine tasting somewhere along the field-trip route.

Top 10 Things *Not* to Miss in San Francisco

One of the nicest things about visiting San Francisco is that, although the city is "big" in terms of attractions and amenities, it is geographically small – only 49 square miles. Consequently, it is very easy to see and do a great many things in a short period of time. However, it is also easy to spend weeks in San Francisco and still not experience everything "The City" has to offer. So, here is a list of the top 10 things not to miss in San Francisco, according to the San Francisco Travel Association (www.sanfrancisco.travelhttp://www.bing.com/search?q=San+Francisco+Travel+Association&form=MSNH14&pq=san+francisco+travel+association&sc=3-32&sp=-1&qs=n&sk= - #):

1. The Golden Gate Bridge, the most famous bridge in the world, manages to impress even the most experienced travelers with its stunning 1.7-mile span. Approximately 120,000 automobiles drive across it every day. A pedestrian walkway also allows the crossing on foot, and bikes are allowed on the western side. The Golden Gate Bridge is said to be one of the most photographed things on Earth.

2. Cable cars have been transporting people around San Francisco since the late 19th century (see picture to the right, by S. Warny). The cars run on tracks and are moved by an underground cable on three routes. Their familiar bells can be heard ringing from blocks away. Tickets ($5) may be purchased at the cable car turnarounds at the ends of each route. Each one-way ride will provide spectacular views of the city's celebrated hills as well as exhilarating transportation. (www.sfcablecar.com)

3. Alcatraz, the notorious former prison, is located on an island of the same name in the middle of San Francisco Bay. Some of the United States' most notorious criminals were incarcerated there. Though several tried, no inmate ever made a successful escape from "The Rock." The prison was closed in the 1960's but stories about Alcatraz are still legendary. A visit to Alcatraz today is fascinating. Recorded cell-house tours are available, allowing visitors to learn about the prison as they explore the buildings and grounds. To reach the island, take an Alcatraz Cruises ferry from Pier 43. Advance reservations are recommended, 415-981-ROCK (7625). (www.alcatrazcruises.com)

4. Fisherman's Wharf is also home to Pier 39, a festive waterfront marketplace that is one of the city's most popular attractions. A community of California sea lions has taken up residence on the floats to the west of the pier and visitors line the nearby railing to watch their antics. From Fisherman's Wharf it's only a short walk to the Wax Museum, Ripley's Believe It or Not! and the famous crab vendors selling walk-away crab and shrimp cocktails.

5. Union Square is the place for serious shoppers. Major department stores and the most exclusive designer boutiques line streets like Post, Sutter, Geary, Grant, Stockton, and Powell. The Westfield San Francisco Shopping Centre houses the largest Bloomingdale's outside of New York City and the second largest Nordstrom in the U.S.

6. North Beach, the city's Italian quarter, isn't a beach at all. It's a neighborhood of romantic European-style sidewalk cafes, restaurants, and shops centered near Washington Square along Columbus and Grant avenues. The beautiful Church of Saints Peter and Paul is a beloved landmark. Coit Tower atop Telegraph Hill offers a splendid vantage point for photos of the bridges and the Bay. Inside the tower, floor-to-ceiling murals painted in the 1930s depict scenes of early San Francisco. (www.coittower.org).

7. The entrance to Chinatown at Grant Avenue and Bush Street is called the "Dragon's Gate." Inside are 24 blocks of hustle and bustle, most of it taking place along Grant Avenue, the oldest street in San Francisco. This city within a city is best explored on foot; exotic shops, renowned restaurants, food markets, temples, and small museums comprise its boundaries. Visitors can buy ancient potions from herb shops, relax and enjoy a "dim sum" lunch, or witness the making of fortune cookies.

8. Dining in San Francisco is an attraction in itself. Known as America's best restaurant city, San Francisco chefs excel at combining the freshest local ingredients, authentic international flavors, and a touch of creative genius. Choose your cuisine – Chinese, Japanese, French, Italian, Spanish, Moroccan, Indian, Malaysian, Mexican, Greek, Russian, or "fusion," a combination of any or all of these influences. Visit our dining section for a list of San Francisco's hottest restaurants, a calendar listing of food-related news and events, and a weekly insider's blog by Marcia "The Tablehopper" Gagliardi.

9. Nightlife in San Francisco is a constantly changing scene. The "hottest" clubs currently are in the South of Market and Mission districts, with live and recorded rock and Latin music. Jazz, blues, swing, and "oldies" music can be found all over town. For a complete list of nightlife options, visit our Nightlife section.

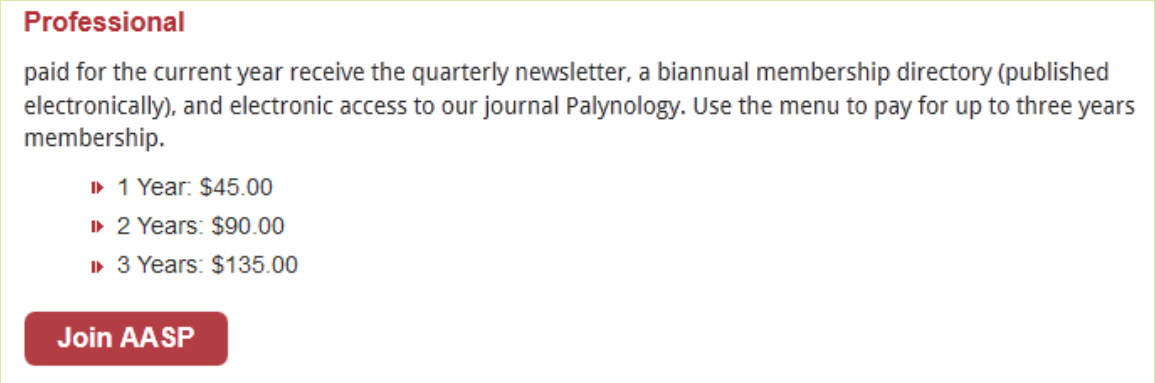
10. The symphony, opera and ballet: A visit to San Francisco would not be complete without a cultural experience. The city is home to internationally recognized **symphony, opera and ballet** companies. Playwrights such as Sam Shepherd and Tom Stoppard routinely introduce their works in San Francisco and avant-garde theatre and dance companies dot the city. The San Francisco Museum of Modern Art, the Asian Art Museum, the de Young Museum, the Palace of the Legion of Honor, and other **museums and galleries** are devoted to the finest of classical and contemporary arts. San Francisco is also home to the California Academy of Sciences - the only place on the planet with an aquarium, a planetarium, a natural history museum, and a 4-story rainforest all under one roof. For a complete museum guide, visit our museums listings.

MEMBERSHIP RENEWAL INSTRUCTIONS

Mohamed Zobaa, AASP-TPS Webmaster

1- Go to the membership page (http://www.palynology.org/membership) in the AASP website.

2- Choose the appropriate membership type and click "Join AASP", see image below.

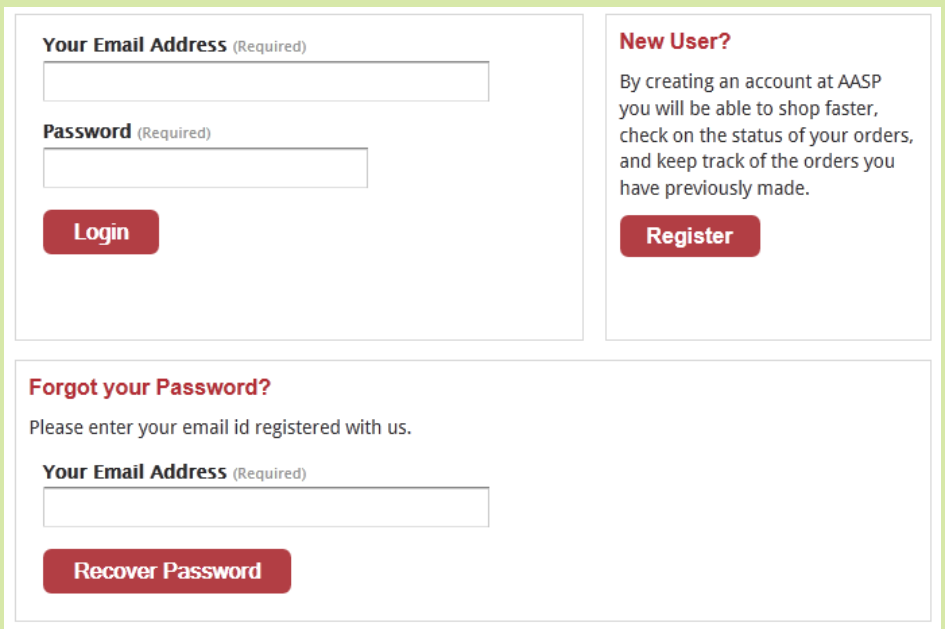


3- You will then be directed to the login page where you can:

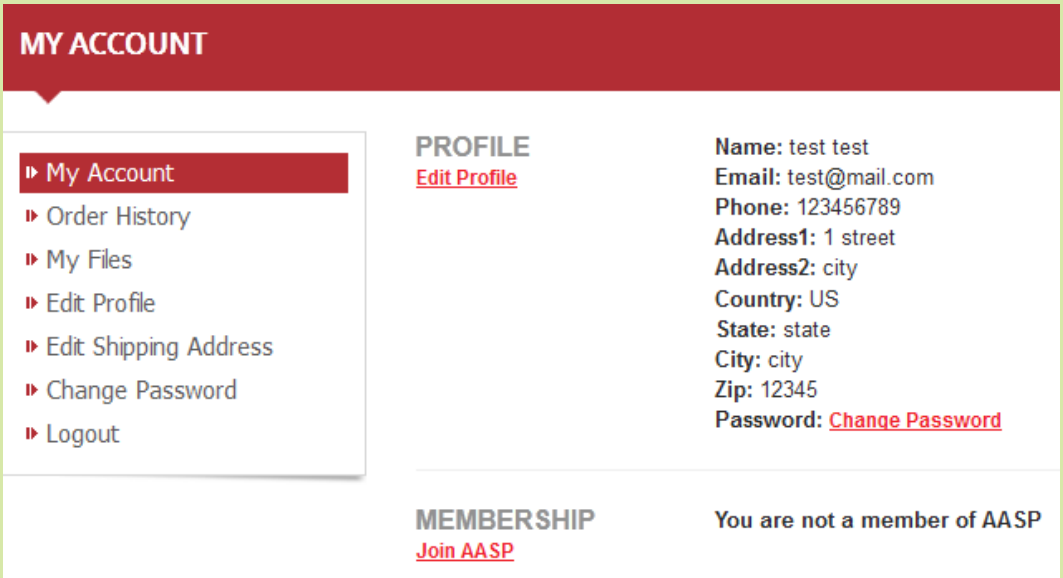
a- directly login, if you have registered before in the NEW WEBSITE

b- create a new account, if you have NOT registered before in the NEW WEBSITE

Note: The new system will not recognize you as a member until you pay your dues thru it.

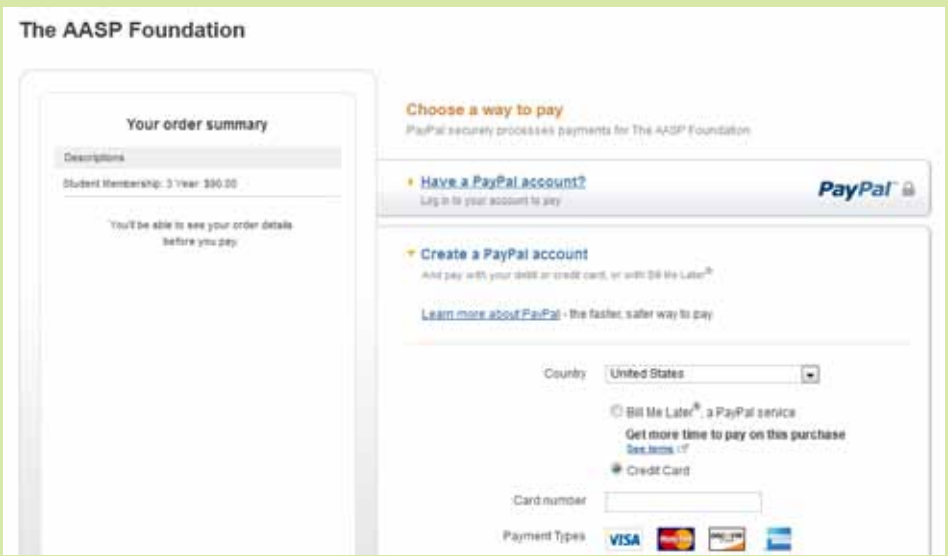


4- Once logged-in, click on the “Join AASP” link under the “Membership” title.



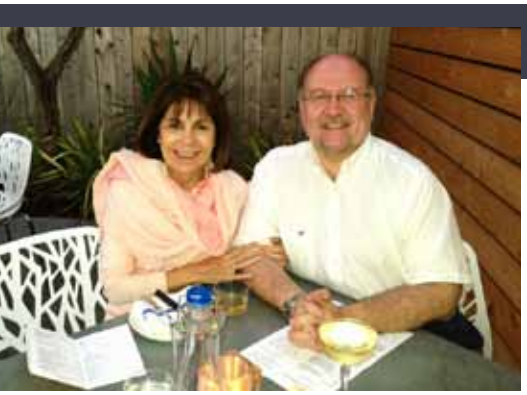
5- Check the desired membership type/numbers of years, then click submit.

6- You will then be transferred to the PayPal website to complete your payment process.



ELECTION TIME

AASP Secretary-Treasurer Candidate



Thomas D. Demchuk

Well, what else can I tell you about myself that I've not said over the past 15+ years in previous election biographies? I've truly enjoyed performing my duties as Secretary-Treasurer for the general AASP-TPS membership, and I look forward to at least another year pouring over the membership and financial books, and seeing everyone in San Francisco in October.

At the recent AASP-TPS Board of Directors meeting, expertly organized and hosted by President-Elect Lanny Fisk, the Board decided to accept the recommendation that the Secretary and Treasurer duties be split into two separate Board positions. This will not happen until election time next year, but look for announcements in upcoming issues of the Newsletter. All by-law changes must be announced to the membership 6 months before a vote can take place: thus I'll post the by-law change in the September issue of the Newsletter, and we'll vote next summer. With the hopeful acceptance of that change, we will be looking for a capable person to take over the Secretarial duties. With the advent of most membership and financial transactions taking place on the web, the combined Secretary-Treasurer duties have not become overly difficult, but they have become more complicated, and perhaps a younger set of eyes will see a better way to do things and keep things appropriately organized. There are also the constant updates and communication with our new Publisher Taylor & Francis which takes time to make certain things are correct to get your copies of Palynology, and get on-line access to the archives. If you are interested in further serving the Society as Secretary please feel free to contact a member of the Board. With the nomination and election of a new Secretary, I will be pleased to continue on as Treasurer (with your support, of course). The AASP-TPS accounts have resided at the same branch of Chase Bank (originally Texas Commerce) in Houston for over 30 years, starting with Gordon Wood, carried on with David Pocknall, and now with me. No surprise this branch started on the first floor of the former Amoco Tower 3, and is now just down the road in the shadows of the BP complex (only a stone's throw away from ConocoPhillips). The mutual fund accounts are also safely held in Houston, so I'm happy to continue on as Treasurer for the upcoming years.

Once again I very much look forward to seeing you at the annual meeting in San Francisco later this year, and I'm really looking forward to the 2014 meeting which will be held in Mendoza, Argentina in conjunction with the International Paleontological Congress. Having had opportunity to visit the vineyards of Mendoza, I can only think of how wonderful a gathering that will be. The Board is also looking at venues for 2015 and beyond, so I'll think we are great hands for the near future.

Webmaster Candidate

Mohamed Zobaa

Mohamed was born and raised in Benha, Egypt. He received his Bachelor's (geology) and Master's (palynology) degrees from Benha University. He received his PhD degree in Geology and Geophysics (emphasis: Palynology) in 2011 from the Department of Geological Sciences and Engineering, Missouri University of Science and Technology, USA. Mohamed is currently an Assistant Professor in the Department of Geology, Faculty of Science, Benha University. Mohamed's duties include teaching palynology and other paleontology courses to undergraduate students, in addition to supervising research projects of graduate MSc and PhD students. Mohamed's research interests and expertise focus mainly on the different applications of palynology, especially in hydrocarbon exploration and paleoclimatic reconstruction. He worked on rock layers from Egypt, eastern Tennessee, southern Louisiana, and Gulf of Mexico. Throughout his career, Mohamed's dearest honors were the 2009 AASP's Best Student Poster Award, and the Outstanding Graduate Scholar Award from Missouri University of Science and Technology.

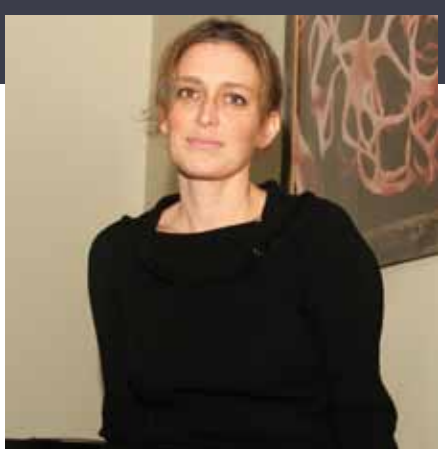
Mohamed started serving the AASP-TPS community as the www.palynology.org Webmaster in the summer of 2012; contemporary with the deployment of the newly upgraded website. Mohamed's main contributions were smoothing the transition to the new platform, adding/changing website content, working with the developers to fix website glitches, and helping board and society members solve their website related problems. Mohamed enjoys working with other AASP-TPS Board Members in their endeavor toward excellent service to the worldwide palynological community.

Managing Editor (*Palynology*) Candidate

James B. Riding

James is a palynologist with the British Geological Survey (BGS), based in Nottingham, UK. After studying geology at the University of Leicester, he persued 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).

Newsletter Editor Candidate



Sophie Warny

Sophie Warny is an Assistant Professor of Palynology in the department of Geology and Geophysics and a curator at the Museum of Natural Science at Louisiana State University in Baton Rouge. She has a long history with AASP as she won the AASP Student Award in 1996. She received her Ph.D. from the Université Catholique de Louvain, in Belgium in 1999 working with Dr. Jean-Pierre Suc. Her doctoral dissertation focused on the Messinian Salinity Crisis. Since graduating, she has been working on Antarctic sediments that were acquired via the ANDRILL SMS and the SHALDRIL programs. In 2011, she received the NSF CAREER award to support her palynological research in Antarctica. In addition to her research, she teaches Historical Geology, Palaeobotany, and Micropaleontology. She also manages the education and outreach programs for the Museum. She currently has a research group that is composed of three master students (Isil Yildiz, Steve Babcock, and Breigh Rhodes) and four PhD students (Kate Griener, Marie Thomas, Shannon Ferguson and Jill Bambricks). Thanks to these students, ongoing projects in Warny's lab at CENEX cover geological topics ranging from Cretaceous to Recent, in various regions of the globe; including Gulf of Mexico, Gulf of Papua, Canada, the U.S. and Antarctica. Since being hired on tenure-track at LSU, she graduated eight students, all are currently employed in the oil and gas industry (see www.geol.lsu.edu/warny for details). Sophie has been the newsletter editor since 2007 and this NL marks her 30^{ieth} issue. She is glad to accept the nomination for this position and will do her best to keep bringing news of interest to the palynological community.

Jennifer O'Keefe

Jen O'Keefe, Associate Professor at Morehead State University, is an active member of several professional societies, including AASP – the Palynology Society, the Geological Society of America (GSA) and the International Committee for Coal and Organic Petrography (ICCP). Jen is no stranger to service, presently serving as the 2nd vice chair of the GSA Coal Geology Division, and has served on the AASP board of directors as a director-at-large from 2009-2011, co-hosted the 2012 meeting, as well has having served in a variety of committee and ad hoc roles in numerous societies over the years.

Jen received her M.S. from Texas A&M University and Ph.D. from The University of Kentucky; both studies examined the paleoecology of Paleogene peat-forming systems. These studies led to her current interests in fungi in the fossil record and changes in angiosperm wetland communities since the Cretaceous. Jen teaches traditional face-to-face and online, asynchronous courses in Geology at Morehead State University and has several undergraduates learning palynology and organic petrography in her lab.

As president-elect of AASP, Jen will work with the Board to continue to guide our transition into the 21st century and crystallize our vision for the future growth and development of the society. She envisions part of this transition as a return to our roots as palynologic educators through short-courses and workshops for colleagues in complementary and supplementary fields, as well as for the teachers guiding the next generation of palynologists. Another part of this transition needs to be continuing to increase our on-line visibility. We have under-utilized opportunities through streaming video, Twitter (follow Jen's research @PalyJen), and development of and support for on-line resources (such as Time Scale Creator palynology packs, improved links to the John Williams Collection, and modernization of existing "Paly Disks") that would make AASP even more visible and enable the society to play a more active role in recruiting and training the next generation of palynologists.

Martin Farley

I am honored to be a candidate for President of AASP, The Palynological Society. I received a B.S. in geosciences from Penn State, where Alfred Traverse was my undergraduate advisor. This gradually drew me from a general interest in paleontology toward palynology. This then led to a master's in geology from Indiana University with David Dilcher. I joined AASP in the early 1980's, while at Indiana. I then returned to Penn State for a Ph.D. with Traverse. My graduate work was directed toward the association of palynomorphs with nonmarine depositional environments and what that tells us about the distribution of plants across the landscapes of the past. As a postdoctoral fellow at the Smithsonian Institution with Scott Wing, I extended that to an examination of how plant distribution responded to climate change during the Early Eocene. This period of my career alternated biological and geological emphases on these patterns, which was highly beneficial to my development.

I then went to work at Exxon where my work can be summarized as biostratigraphy on every continent except Antarctica (primarily Cretaceous-Recent) and the synthesis of chrono-, bio-, and sequence stratigraphic data toward a global standard published in the Sequence Stratigraphy of European Basins (SEPM Special Publication 60). The sum of both these was to make clear not only the value of relating palynology to the geologic context, but the importance of integration of all paleontologic groups with each other.

In my current job as Associate Professor and Chair of the Department of Geology & Geography at UNC-Pembroke, I have concentrated on geological education, as that is more nearly my "day" job. I have worked on how to maximize student exposure to palynology. As one example, I presented a poster in Southampton about a student exercise I developed on North Carolina climate change and palynology. This poster was not only to inform palynologists about a teaching activity, but to encourage sharing of what we develop in teaching to benefit each other and make it easy for those outside palynology to use it in teaching.

I was an officer of the North American Micropaleontological Section (NAMS) of SEPM for years, culminating as President in 2009-2010, the first palynologist to hold that office. This gave me an opportunity to convince foram and nannofossil paleontologists that there is more to micropaleontology than calcareous fossils. In 2000 and 2002, John Armentrout and I wrote articles for Geotimes and Offshore reviewing the history of micropaleontology in the petroleum industry and explaining its value.

My AASP service can be summarized as follows: I was chair of the Short Course Committee in the early 1990's and organized the Fungal Palynomorph Short Course presented by Bill Elsik in 1992. I was also on the Board of Directors from 1992-1994. I was the Fieldtrips Coordinator on the Organizing Committee for the IXth IPC in Houston in 1996, which incorporated the 29th AASP Annual Meeting. In addition, I co-convened the Symposium on "Palynology and Sequence Stratigraphy" there. Since 2006, I have chaired the Awards Committee, which handles Student Scholarships, Annual Meeting awards, student meeting travel support, and professional awards. I also coordinate the informal working group to increase the palynostratigraphy available within Timescale Creator.

In 2002, I was one of the keynote speakers at the 35th Annual Meeting (joint meeting with BMS and NAMS) in London. In this talk, I discussed the importance of demonstrating the value of our field to broader audiences (geological, biological, or even broader), and this has been a theme I have returned to since. If palynology is to thrive, we need to make broader audiences aware of the value in our science. AASP is an obvious organization to lead in this. I would be honored to be able to play a role as President.

Director-at-Large Candidates

Cortland F. Eble

I was born, and grew up, in rural New Jersey, about an hour's drive west of New York City. After graduating from high school in 1977, I attended Auburn University in Alabama, majoring in geology with minors in chemistry and botany. While at Auburn, I began to study paleobotany and palynology with my undergraduate advisor, Dr. Robert Gastaldo (now at Colby College in Waterville, Maine). I also was introduced to coal geology at Auburn, visiting some surface mine operations in the Black Warrior coal field, and examining some macerations of the Mary Lee coal bed.

In 1981, I went on to West Virginia University in Morgantown, West Virginia where I worked on the palynology of coals throughout the Pennsylvanian section, two of which, the Redstone (Late Pennsylvanian) and Fire Clay (Middle Pennsylvanian), became M.S. and Ph.D. topics. As a graduate student, I worked in the coal lab to help support myself, and in doing so, learned a great deal about coal analytical procedures, coal chemistry, and coal petrography. I also was able to spend a month coring ombrogenous peat deposits in Indonesia with colleagues from the U.S. Geological Survey I had been introduced to.

In 1988, I moved to the U.S. Geological Survey in Reston, Virginia where I spent 15 months as a post-doctoral researcher looking at the palynology of Pennsylvanian coals from across the U.S., but mainly from the Appalachian Basin.

In 1990, I was offered, and accepted, a position at the Kentucky Geological Survey in Lexington, Kentucky, and have been at the KGS since that time. Although my initial work was centered on coal, coal palynology, coal petrography, coal chemistry, and coal resource assessments, I have also been involved in a coalbed methane exploration project, shale gas resource projects, and carbon capture and storage projects during my tenure at the KGS. With Survey colleagues, I have helped organize and run several field trips and meeting symposia and sessions for the Palynological Society (AASP), the Geological Society of America (GSA), the American Association of Petroleum Geologists (AAPG), and the Society for Organic Petrology (TSOP).

I am an adjunct faculty member of the Department of Earth and Environmental Sciences at the University of Kentucky. As an adjunct professor, I teach coal geology, and serve on graduate committees, assisting graduate students.

Last summer, Jennifer O'Keefe and I were fortunate to host the Society's annual meeting. I hope to continue helping the Society by serving as Director at Large.

Fabienne Marret

I am a palaeoecologist/palaeoceanographer using proxies (pollen, spores, organic-walled dinoflagellate cysts and other NPPs) enabling to understand land-ocean interactions from long- to short term timescales, from the poles to the equator. While studying a licence in Earth Sciences at the University of Luminy, in Marseilles (France), I had the pleasure to meet with Raymonde Bonnefille, Annie Vincens and other famous scientists from the Laboratoire de Géologie du Quaternaire. Annie introduced me to the world of African pollen and, although I did not have to study palynology (while doing a Geology Masters), I was hooked. I was then offered to study for a PhD with Prof Hans-Jurgen Beug (Gottingen, Germany), on African Quaternary climate, but before going there, I studied a D.E.A. in oceanography at the University of Bordeaux I (Talence, France), under the supervision of Jean-Louis Turon, who taught me extensively about Quaternary organic-walled dinoflagellate cysts. It is with this background knowledge that I started my PhD studying Quaternary marine palynology in the Gulf of Guinea, under the supervision of Prof Beug and Dr Lydie Dupont. I obtained my PhD in 1994, at the University of Bordeaux I, and went to Montreal, Quebec to carry out post-doctoral research with Prof Anne de Vernal. This is when we started to look at the Southern Ocean for the modern dinocyst distribution and developed the first database for this part of the word. In 1997, I had a research contract at the School of Ocean Sciences of the University of Wales (Bangor) and I fell in love with the place (and later with my now Welsh husband). After a couple of years of back and forth between Montreal and Menai Bridge, I settled in North Wales in 1999 where I carried out research projects funded by EU money (Marie Curie fellowship) and other grants. It was in 2005 that I joined the Department of Geography at the University of Liverpool and I am currently a Reader, teaching climate change and palynology (amongst other subjects of course) and researching all aspect of ecology and palaeoecology of Quaternary dinoflagellate cysts as well as land-ocean interactions. A recent research project was to investigate the timing and amplitude of the reconnection of the Black Sea to the Mediterranean at the beginning of the Holocene. I am also very keen at extending the dinocyst databases that we have been using for reconstructing past oceanographic conditions, and from time to time, discovering new species. I have been a member of AASP since in 1994, but also at the APLF (board member 2005-2013), SGF, QRA (Publicity officer 2009-2011) and TMS where I am currently the Chair of Palynology (since 2010). I am also an assistant editor at *Palynology, The Holocene* and on the editorial board of *Marine Micropaleontology*. And I forget, a councillor at the IFPS. I co-organised with Jane Lewis and Lee Bradley the DINO9 conference at the University of Liverpool in August-September 2011, which I barely managed to attend before giving birth to my daughter Gwen on the 4th of September 2011. I am extremely honoured for the nomination of director-at-large and am looking forward to contribute to the success of this thriving association.

Iain Prince

I originally studied Physical Geography at the University of Hull, UK. During this time I completed a dissertation into the Palynology of Tufa Barrage Systems in the White Peak of Derbyshire (palynology of the last 12K years) which was eventually published in the Holocene. This project stimulated me to study palynology farther. I completed a PhD into the palynology of the Upper Cretaceous Chalks at the University of Wales, Aberystwyth, mainly studying dinoflagellates.

On completion of this in 1996, I began work as a consultant in Geochem, Chester concentrating on the Tertiary of the West of Shetlands. In 1997 I moved to Aberdeen to begin with RPS Consultants (concentrating on Tertiary/Cretaceous) of the North Sea/Mid Norway. In October 1998 I started work in Stavanger with Statoil. Initially this work was mainly concentrated on the North Sea/Mid Norway and West of Shetlands but within a few years I looked at offshore Venezuela, Angola, Brazil. I completed many exploration projects but also managed the first offshore use of both micro and palynology and horizontal drilling within

Statoil. I was also a keen user of TacsWORKS especially fuzzy C means. From 2003-2006 I was Advisor in Biostratigraphy, responsible for a group of 7. With Statoil's acquisition of Encana's GoM assets in 2005 I began working on the Gulf of Mexico eventually transferring to the new Houston office in 2007.

Opportunities outside of Statoil beckoned in 2008 and I transferred to Shell as Team leader of a Biostratigraphy team in Holland and Houston, initially in Holland before returning to Houston in May 2008. Subsequently in 2010 I became Global Head of Biostratigraphy in Shell with oversight of approx 26 biostratigraphers located in Houston, Holland, Aberdeen, Stavanger, Nigeria, Miri and Australia.

André Rochon

André Rochon is a marine geology professor at ISMER – Université du Québec à Rimouski since 2003 with a specialisation in marine palynology. He obtained his PhD in Environmental Sciences in 1997 from the Université du Québec à Montréal. He was a postdoctoral fellow at the University of Westminster (UK) from 1997 to 1999, and a researcher at the Geological Survey of Canada at the Bedford Institute of Oceanography (Dartmouth, Nova Scotia, Canada) from 1999 to 2003. He is a member of the inter-university research networks GEOTOP and Quebec-Ocean, and is currently a principal investigator in research networks such as ArcticNet, a Network of Centres of Excellence, and ArcTrain Canada. His research interests include: the Holocene paleoceanography of the Canadian Arctic using dinoflagellate cysts as proxy indicators; the cyst-theca relationships of Arctic dinoflagellate species; dinoflagellates and their cysts as marine invasive species in Canadian coastal waters; the distribution of dinoflagellates/cysts in Canadian Arctic waterways; the chemical composition of dinoflagellate cyst membrane using FTIR and Raman spectroscopy; and the study of dinoflagellates using micro CT-Scan technology. He has been a member of AASP since 1995.

ELECTION

All AASP-TPS members will receive an email request to vote via SurveyMonkey. The votes are anonymous.

Your vote is important to the society. Thank you!

Semi-Automated Pollen Identification System for Forensic Geolocation Applications

Grace M. Hwang[1†], Kim Riley[1], Carol Christou[1], Garry Jacyna[2], Jeff Woodard[1]
[1] Signal Processing and Communications Analysis Department, The MITRE Corporation, McLean, VA
[2] Naval Program Division, The MITRE Corporation, McLean, VA
[†] Corresponding author: gmhwang@mitre.org, 571-205-2482, Fax: 703-983-6708

The use of pollen grain analysis for forensic geolocation has been explored for several decades [1-5]. Several pitfalls of pollen analysis that preclude it from routine use are well known. First, taxonomic classification at the family or genus levels lacks geographical specificity. Second, the time-to-answer is limited by the availability of palynologists with expertise in the geographical regions of interest. Third, there is no unified global database of pollen types that encompasses both morphological descriptors and geolocational attributes. Most databases are ad hoc and tailored either to morphological descriptors [6-9] or provide geolocation information but without images [10], collectively lacking the metadata essential to forensic geolocation. Fourth, owing to long time-scale retention of pollen grains on clothing even after washes, forensic examiners can be confused by pollen assemblages since temporal disambiguation of grain is not possible with present day tools. Grains collected over several weeks from different locations can confound an examiner's interpretation of evidence.

To understand the first two pitfalls, MITRE recently conducted a study that highlights new advances in the biological sciences that can dramatically improve the accuracy and precision of geolocation. In particular, MITRE analyzed a pollen collection from the Neotropics comprising 11 taxa at 223 sites, and found that genus-level distinction enabled geolocation to within 3% accuracy in latitude and 1% accuracy in longitude with an average precision of 4^{o} and 4.5^{o} in latitude and longitude, respectively, based on pairwise taxa probability distributions. For the Neotropics, this precision translates to an area of approximately 180,000 square kilometers [11]. When species-level information was examined, city-specific accuracy emerged (for example) in Mexico and Brazil [11]. Fueled with this insight, we used MITRE's computer vision tool to distinguish morphologically similar pollen grains (Spruce: *Picea mariana*, *P. glauca*, and *P. rubens*; *Abies balsamea*; Pine: *Pinus banksiana*, *P. strobus*, *P. resinosa*, and *P. rigida*) achieving accuracies of 97.95% and 93.6% at the genus and species levels, respectively, surpassing prior records in pollen identification [12, 13]. Our analysis was based on 641 grains and the data for each grain consisted of approximately 50 images. We therefore suggest that computer vision is a feasible approach for species-level pollen ID that would improve geographical resolution while reducing the time-to-answer via semi-automation (i.e., aiding the fatigued examiner), successfully addressing the second pitfall.

To address the third pitfall, MITRE hosted a Pollen Coalition Workshop in the fall of 2012 that was attended by palynologists from different scientific fields (e.g., paleoecology, paleontology, paleoclimatology, palynology, melissopalynology). Using knowledge derived from the Workshop, several follow-on discussions, and independent analyses, members of the Pollen Coalition completed essential steps for realizing a unified pollen database with the aim of fulfilling forensic geolocation requirements for the Neotropics. Briefly, the top 15 families from which species should be identified were established; these would be the high-priority species that should be compiled first. In addition, an optimal protocol for pollen grain imaging was identified. A strategy for harmonizing existing databases into an integrated architecture was discussed for which consensus was achieved on the appropriate set of morphological pollen grain descriptors. Once a unified pollen database is constructed,

we propose that a rapid query tool based in part on computer vision would enhance database response times resulting in improved examiner efficiency and reduced time-to-answer.

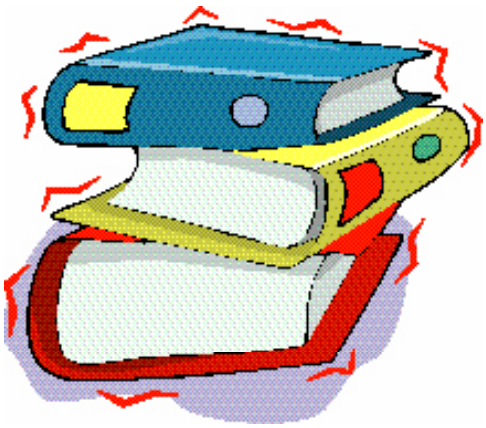
Finally, we surmise that the fourth pitfall on temporal disambiguation of grains can be minimized if one can estimate the relative age of pollen grains extracted from trace evidence. As such, we hypothesize that computer vision tools would be capable of grain-age classification given a sufficiently large sample size. Future studies will explore age discrimination of grains, in addition to the automatic identification of pollen at the species and genus levels taking into account the effects of mounting media type, morphological complexity, grain size, rotation, optical resolution, and grain occlusion.

REFERENCES

1. Bryant, V.M. and G.D. Jones, Forensic palynology: Current status of a rarely used technique in the United States of America. Forensic Science International, 2006. 163(3): p. 183-197.
2. Stoney, D.A., A.M. Bowen, P.L. Stoney, and S.B. Sparenga, (U) Review and analysis of geolocation and related forensic source determination efforts I: Overview and method-imposed limitations. Journal of the Intelligence Community Research and Development, 2006: p. 1-19.
3. Stoney, D.A., A.M. Bowen, V.M. Bryant, E.A. Caven, M.T. Cimino, and P.L. Stoney, Particle combination analysis for predictive source attribution: Tracing a shipment of contraband ivory. Journal of American Society of Trace Evidence Examiners, 2011. 2(1): p. 13-72.
4. Hwang, G.M. and D. Masters, Forensic Geolocation Challenge: Is Pollen Analysis the Answer? July 2013. (http://www.palynology.org/), newsletter supplement.
5. Warny, S., Museums' Role: Pollen and Forensic Science., in Science 2013, AAAS. p. 1149.
6. Stanley D and Gretchen D. Jones collection. http://pollen.usda.gov/Reference_Collection/Jones_Collection.htm, accessed 01/03/2013.
7. Neotropical Pollen Database. http://research.fit.edu/paleolab/downloads/pc_download.php, accessed 01/03/2013.
8. CENEX Pollen Database. www.geol.lsu.edu/warny, accessed 3/3/2013.
9. Society for the Promotion of Palynological Research in Austria. Palynological Database. http://www.paldat.org/, accessed 05/23/2012.
10. Neotoma Paleoecology Database. http://www.neotomadb.org/, accessed 10/31/2012. October 31, 2012]; Available from: http://www.neotomadb.org/.
11. Christou, C.T., G.M. Jacyna, G.M. Hwang, and M.B. Bush. Geolocation Analysis Based on Pollen Data Samples from the Neotropics. (In review).
12. Punyasena, S.W., D.K. Tcheng, C. Wesseln, and P.G. Mueller, Classifying black and white spruce pollen using layered machine learning. New Phytologist, 2012. 196(3): p. 937-944.
13. Riley, K., J. Woodard, and G.M. Hwang, Automated pollen classification, In Prep: McLean, VA.

Approved for Public Release; Distribution Unlimited. Case # 13-1293 and 13-2039

Pictured above: MITRE Corporation in Virginia.



New Contributions Series publications available

Report provided by Bob Clarke

AASP Contributions Series Number 45
Seven Decades of Indian Tertiary Spore-Pollen Flora: A Compendium

Ramesh K. Saxena and S.K.M. Tripathi

Abstract: The main objective of this book is to synthesize information on the Indian Tertiary palynology published so far. The book can broadly be divided into three parts: Introduction, Synopses of publications and Discussion.

The introductory part provides a brief introduction of the Book, historical background of Tertiary palynology in India, an overview of the Indian Tertiary sediments, systems of classification of palynofossils used in India and their merits/ demerits, and field and laboratory techniques relevant to palynological studies.

This is followed by the synopses of all the publications on Indian Tertiary palynology published during the last seven decades (1941 to 2010). Altogether, there are 499 entries. Each entry is numbered and begins with its author(s) and year of publication, followed by the title, a brief synopsis and key-words. These are arranged alphabetically according to author's surnames. For ready retrieval of available information, various categories of indices, viz. Author Index, Index of Stratigraphic Units, Index of Geologic ages, Index of Geographical areas/Sedimentary Basins and Subject Index, are provided. The indices will help the readers to synthesize the available information in more coherent way and in broader perspective.

The Discussion part includes a summarized account of palynofloras and their biostratigraphic application in various regions of India and their palaeogeographical and palaeoclimatic implications. A number of tables are provided to summarize biostratigraphic zones and their characteristic palynofossils. A brief account of some selected fossil pollen genera, which are of regional and global significance, is also given, with suitable illustrations. Some of these forms elucidate diversification in angiosperms and migration of some taxa between Africa, India, South-east Asia and South America during the Tertiary Period. In this respect distribution of pollen having affinity with the families Arecaceae, Bombacaceae, Dipterocarpaceae and Ctenolophonaceae has been commented upon. An effort has been made to identify gaps in our knowledge about Indian Tertiary Palynology and suggestions have been given for future studies.

182 pages Electronic version ONLY; (order online, link then sent to download searchable pdf file).
Cost: $20.

AASP Contributions Series Number 46
A Compilation and Review of the Literature on Triassic, Jurassic, and Earliest Cretaceous Dinoflagellate Cysts

James B. Riding

Abstract: Triassic and Jurassic dinoflagellate cysts are ideal index fossils because they are typically geographically extensive, and many taxa have relatively short ranges and/or well-defined range tops/bases. Consequently they are extensively utilized in geological problem-solving in both the industrial and academic spheres. A comprehensive list of the literature on Triassic to earliest Cretaceous organic-walled dinoflagellate cysts comprises 1347 publications with every continent being represented. The most significant publications are highlighted with an asterisk and each item of literature is briefly described by the use of a string of keywords that indicate the scientific scope, the stratigraphic interval covered, and the geographic focus. These publications are dominated (45.4%) by contributions from West Europe, where the type sections are all located. The next best-studied regions are the Arctic (7.5%), Australasia (7.1%), and East Europe (5.5%). Other regions, namely Africa, Central America, North America, South America, Antarctica, China, the Indian subcontinent, the Middle East, and Russia, each represent less than 5% of the literature on this topic. Most publications are focused on the Late Jurassic. This is largely because of the extensive nature of Upper Jurassic marine strata and the diverse nature of Late Jurassic dinoflagellate cysts.

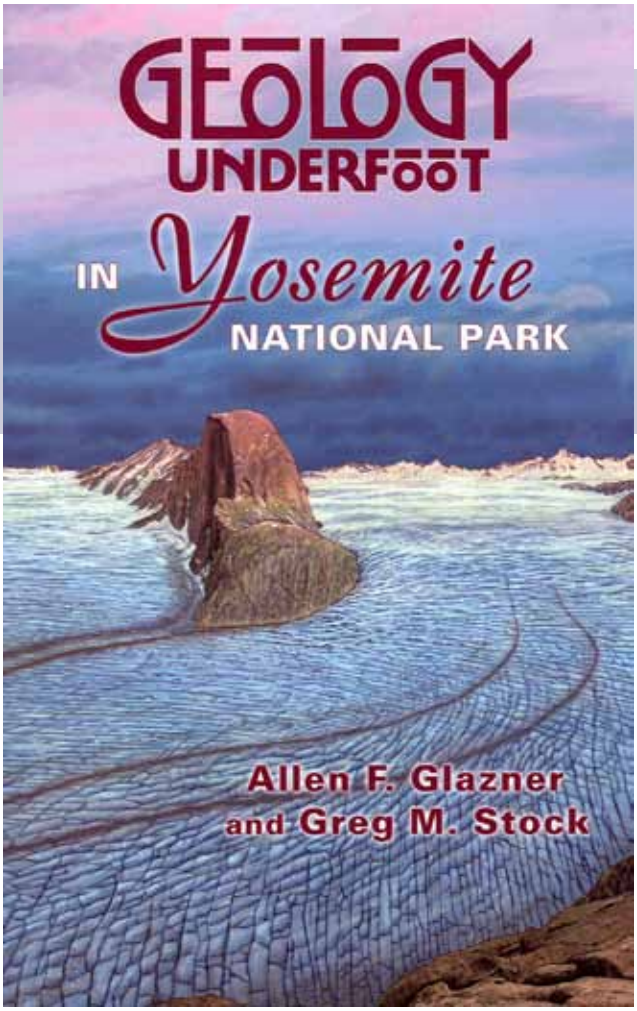
119 pages, includes searchable pdf version, spiral bound, soft cover. Cost: $30; shipping to US address $5; shipping to Canada address $13; shipping to other non-US address $18 (First Class parcel).

AASP Contributions Series Number 47
Miospore Palynology and Biostratigraphy of Mississippian Strata of the Amazonas Basin, Northern Brazil

Geoffrey Playford and José Henrique G. Melo

Abstract: Mississippian (Lower Carboniferous) sequences penetrated by numerous hydrocarbon-exploratory wells in the Amazonas Basin, northern Brazil, contain an abundance and diversity of plant microfossils that are readily applicable to biostratigraphic analysis, and hence to detailed correlation and age determination of the host strata. This study, presented in two successive parts, comprises a detailed systematic-descriptive survey of miospore assemblages preserved in core samples from selected boreholes that intersected and are well representative of the Mississippian portion of the Oriximiná Formation and of the partly overlying, partly laterally equivalent Faro Formation. In the current Part One, representatives of trilete miospore taxa featuring relatively simple morphology (i.e., with acavate/azonate exines, variously sculptured) are described and illustrated. Part Two completes the systematic analysis of the miospores and details their stratigraphic significance, re-assessing and augmenting a palynozonal scheme established previously (in 2003).

201 pages, 26 color plates, perfect bound, soft cover. Cost: $30, shipping to US address $6. shipping to non-US address $22 (Priority Flat Rate envelope).B



Geology Underfoot in Yosemite National Park

A book review provided by Reed Wicander
Department of Earth and Atmospheric Sciences
Central Michigan University
Mt. Pleasant, MI 48859

This book, although not in the format of the *Roadside Geology* series, is nonetheless a welcome addition to that series published by Mountain Press Publishing Company. Yosemite National Park attracts around four million visitors a year to its spectacular scenery and diverse biota. Although designated a national park by Congress in 1890, Yosemite Valley and Mariposa Grove were still left under state control. It wasn't until 1905 that Congress agreed to consolidate Yosemite Valley and Mariposa into Yosemite National Park.

As the author's state in the Introduction, "In the simplest terms, Yosemite's geological story consists of the formation of granite and its later sculpting by water and ice, but the larger picture is a tale of ancient supercontinents, the formation and closure of ocean basins, a giant volcanic mountain range similar to today's Andes, San Andreas-type faults, and the repeated appearance and disappearance of massive ice fields and glaciers" (p. 1). Because the authors presume no previous geologic knowledge, the rest of the Introduction is an overview of the geology needed to fully appreciate the grandeur of Yosemite. What follows is the requisite overview of plate tectonics, the concept of geologic time in which the authors illustrate its enormity by having a single step represent 10 million years (460 steps equals 4.6 billion years, with the width of a pencil line at the end of the last step corresponding to the length of recorded human history), and then a history of the ancestral West Coast beginning 800 million years ago, and concentrating on its Mesozoic Era geologic history, and finally on its landscape development during the Cenozoic Era.

The middle part of the Introduction concerns glaciers, as in what they are and how they sculpted Yosemite. During a trip in 1871, John Muir, whose name will always be associated with Yosemite National Park, and who was instrumental in convincing Congress to designate that part of the Sierra Nevada a national park, became the first person to verify the presence of glaciers in the Sierra Nevada, and thus provide the evidence for the glacial origin of Yosemite Valley and other landforms in the Sierra Nevada. The authors do a very good job in explaining what a glacier is, how it moves, erodes, deposits materials, and modifies the landscape. These explanations are nicely supplemented with a number of diagrams and color photographs from Yosemite to illustrate their points. The glacial history of Yosemite is then presented, followed by the role of rivers and streams in Yosemite's evolution.

Lastly, an historical overview of the geologic study of Yosemite is given. Going back to the founding of the California Geological Survey in 1860, the authors trace the history of the geologic

study of Yosemite. Tribute is paid to important figures such as William Brewer, Clarence King, John Muir, Israel Russell, Josiah Whitney, and others, and their contributions to a better understanding of the geologic history of Yosemite.

The remainder of the book is divided into 25 vignettes, each of which focus on particular elements of Yosemite's history. Each vignette has a title, followed by a catchy phrase that really tells the reader what each story is going to be about. Examples include: 2. Vertical Exposure: *The Geology of Yosemite Climbing*; 6. That's the Way the Cookie Crumbles: *The 1982 Cookie Cliff Rockslide*; 16. Soda Springs: *That Fizzy Taste Carries a Geochemical Surprise*.

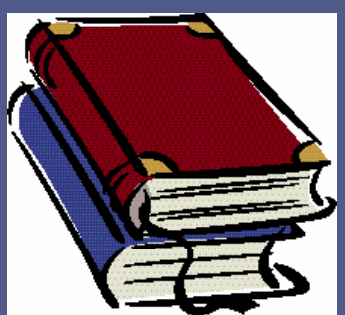
The 25 vignettes pretty much follow the same format. On the page opposite the vignette is a map showing the region covered in that vignette with all appropriate trails, roads, geology, etc., and a short paragraph on "Getting There," directions for getting to the place covered by the vignette. Each vignette tells a story about some feature or features in Yosemite, and is well illustrated by diagrams, maps, charts, and numerous color photographs. As might be expected, many of these vignettes relate to the glacial history of Yosemite, and one of my favorites is 3. Pushed Off a Cliff: *The Origin of Yosemite Falls*. "Next to Half Dome (vignette 11), Yosemite Falls probably is the most iconic image of Yosemite" (p. 71). In addition to explaining the origin of the falls, along with some interesting calculations about how much energy is expended as the cascading water turns into mist, this vignette has, in my opinion, some of the best photos in the book. I particularly liked the last one depicting what the early glaciation in Yosemite Creek's valley and Yosemite Valley looked like on the left side, and next to it, what Yosemite Falls looks like today.

Other vignettes I found particularly interesting were: 2. Vertical Exposure: *The Geology of Yosemite Climbing*. This vignette covers the history of rock climbing in Yosemite, as well as describing the numerous smaller-scale geologic features that allow for seemingly unclimbable walls and spires to be climbed. 11. Half a Dome is Better Than None: *Sentinel Dome and Half Dome*. This vignette describes the origin and history of many of the famous domes in Yosemite, and contains some great photographs. 22. An Ancient, Ice-Bound Sea: *Mono Lake and Ancestral Lake Russell*. As the authors mention, most of the topics relating to the Mono Basin are covered in several excellent field guides. However, what is covered in this vignette is the "record of past climates shown by the lake and changes in its water level." One of the things that make Mono Lake useful for climatic studies is the numerous ash layers in and around the lakes which provide geologists with an accurate chronometer as to the history of the lake and when climate changes took place. This vignette takes the reader through the history of ancestral Lake Russell and its now smaller remnant, Mono Lake, and lays out a tour of three stops that cover all the important features of this area.

Following the vignettes is a Glossary, defining the various terms used in the book, Sources of More Information, listing relevant articles and books for further reading for the Introduction and all 25 vignettes, and lastly, an Index.

I thoroughly enjoyed this book, and would highly recommend it for anyone planning a trip to Yosemite National Park, or for anyone interested in the geology of the area. I recommend it to my students in my introductory classes when we cover glaciers and as a book they should read if they plan to visit Yosemite.

Geology Underfoot in Yosemite National Park
by Allen F. Glazner and Greg M. Stock. ©2010. Mountain Press Publishing Company, P. O. Box 2399, 1301 South Third Street West, Missoula, Montana 59806. ISBN 978-0-87842-568-6. 308 pages, 150 color photographs, 61 color illustrations and maps.
$24.00 (paperback)



Conference News and Updates

46th Annual Meeting
AASP – The Palynological Society
San Francisco, U.S.A.
October 20-24, 2013
SEE PAGES 10-19

Important GSA Diversity Initiative

As a result of our 2012 Diversity Committee meeting in Charlotte NC, GSA is embarking on a major "On To the Future" (OTF) initiative, aimed at involving the entire society! The goal is to bring 125 students from underrepresented groups to the 125th Anniversary Annual meeting in Denver. Timing is critical and OTF will be GRASS ROOTS, leveraging multiple resources to pull this off. We are asking and challenging individual GSA Members to identify and to support OTF students to attend their first Annual meeting where they will: 1) experience the richness of our professional meetings and interactions, and 2) receive recognition, meeting registration, and support for travel, food, and lodging expenses.

The goal is to bring 125 students from underrepresented groups to the 125th Anniversary Annual meeting in Denver.

I can't tell you how major this is. When in GSA's history has any effort like this even been attempted? This initiative can be pivotal culture shift for GSA. We have had incredible support from GSA President George Davis, and the GSA staff. We now need YOUR help by spreading the word, encouraging donation support, identifying students, and volunteering to assist with activities. If you or someone you know can volunteer time to help this OTF cohort during the meeting, and organizing activities, etc., please contact Gary Lewis (glewis@geosociety.org) at GSA.

A major discussion item for the Denver committee meeting will be how to sustain this OTF program. We are on a very positive trajectory. Our committee is changing from one that languished for years, to now one that GSA members are asking if they can serve on! Chris Suczek will officially take over as chair of the Diversity Committee as of July 1, 2013, but I anticipate remaining involved to see the OTF initiative through the 2013 Annual meeting.

Students are absolutely the future and lifeblood of GSA. This is a tremendously exciting opportunity that we ask you, your colleagues, and your institutions/companies to actively participate in. The new OTF webpage has been set up at: http://community.geosociety.org/OTF .

Please help us make this a huge success that will have a wave of ripple effects through our society for the next 125 years. More diverse students will move GSA "On To the Future"!

Margie Chan
2012-2013 GSA Diversity Chair
May 10, 2013

Dear Colleagues,

The Organizing Committee of the Fourth International Palaeontological Congress, Mendoza (Argentina), 2014 is sending the **May IPC4 Newsletter** to keep you informed about the most recent advances. Please, you can also forward it to the colleagues you think may be interested.

Mendoza is waiting for you

Come and join us in Mendoza, the first American City to be the host of an IPC. This 4th IPC edition will offer you an excellent opportunity to share your scientific experience with palaeontologists all over the world. Take the chance to enjoy exciting field trips in unforgettable landscapes. Delight in Mendoza, renowned for its location at the foothills of the Andes in central western Argentina.

Venue

We have a new venue. Please, note that it has been moved to the Sheraton Mendoza Hotel which is situated within downtown area of Mendoza and offers a unique environment to meet with colleagues in a relaxing atmosphere. The Hotel has a well-equipped Convention Center with the latest technology including High Speed Internet Access and Wi-Fi, and a large area for poster exhibition. You can check at the Sheraton Mendoza Hotel website for further information.

Register early and save up to 20%

Please, do not miss the chance for an early registration with a reduced fee. The deadline is **June 27th 2013.** You can visit the IPC4 registration website for further information about registration deadlines and fees.

Programme News

Special Session of the IGPC 596

We are pleased to announce that the International Geoscience Programme IGCP Project 596 "Climate change and biodiversity patterns in the Mid-Palaeozoic" —jointly with the Subcommission on Devonian Stratigraphy— will organize a Special Session in the frame of the 4th International Palaeontological Congress. For further information please visit: IGCP Project 596-Senckenberg and The Subcommission on Devonian Stratigraphy

Five Plenary Lectures are already scheduled:

1. **Palaeontology in the southern world: benchmarks in the history of discovery and research**
   by Beatriz Aguirre - Urreta.

2. **Recovery from the greatest mass extinction of all time: data and models**
   by Michael Benton.

3. **Ordovician origins exceptional preservation and the history of marine life**
   by Derek E.G. Briggs.

4. **Lower Palaeozoic vertebrates from South America: Why are they so rare and so strange?**
   by Philippe Janvier.

5. **The evolution of giants: selection, productivity, and geography of gigantism in plants and animals**
   by Geerat Vermeij.

A new symposium has been recently added:

Palaeobiogeography of Late Cretaceous dinosaurs.
Organizers: Phillip Currie - Rodolfo Coria.

Remember that all proposals for symposia addressing uncovered topics will be considered by the scientific committee. If you are planning to submit a proposal, please take note that the deadline for symposium proposals is June 7th. You may check at the IPC4 symposia website for the topics a proposal should include, or directly contact the Symposium and Workshop Coordinator, Gabriela Mangano, at gabriela.mangano@usask.ca

Invitation for PWG – 2012/2013 (Palynofacies Working Group)

Dear Colleagues,

As you know at the 2012 ICCP meeting (Beijing - China) a proposal for the Palynofacies Working Group (PWG) was presented.

Palynofacies WG will be developed on particulate organic matter present in sediments and sedimentary rocks using the organic matter isolation methods for sample preparation (KC) and applying microscopy techniques (TWL and FM) as principal tool for acquiring data and statistical methods for its interpretation.

The main objective of the PWG will be the determination of the origin of the organic matter (botanical precursors), using a combination of morphology and optical properties (fluorescence and translucency), and the assessment of all aspects of the palynological organic matter assemblage, such as:

- Identification of the individual particulate components;
- Assessment of their absolute and relative proportions;
- Qualifiers of the components (Particle sizes; Preservation states);
- See feasibility of an integration and correlation of the palynofacies information obtained in this WG with the classification of organic components from ICCP (maceral composition);

The subject of this study will be the three main groups of morphological constituents of the OM, which can be recognized in the assemblage. These groups are:

- **Phytoclast Group:** Fragments of tissues derived from higher plants or fungi
- **Amorphous Group:** Phytoplankton or bacterially derived AOM, higher plants resins and amorphous products of the diagenesis of macrophyte tissues
- **Palynomorph Group:** organic walled constituents that remain after maceration using HCl and HF acids

The microscopic analysis will be performed on strewn slides [Transmitted White Light (TWL) and Fluorescence Mode (FM)] and, on polished section [Reflected White Light (RWL) and Fluorescence Mode (FM)] of whole-rock (WR) and kerogen concentrate (KC) samples;

For the 2012/2013 exercise was proposed to study the Phytoclast Group. The main objective of this 1st Exercise will be the characterization of the origin of the phytoclast particles and the all aspects of the phytoclast assemblage, such as:

- Identification of the individual particulate components:
  - Translucent (brown) or opaque (black);
  - Biostructured or structured or “pseudoamorphous“ / amorphous;
- Assessment of their absolute and relative proportions;
- Particle sizes;
- Preservation states;

For KC and WR polished sections, the ICCP vitrinite classification at maceral subgroup level and the inertinite classification at maceral level are to be applied.

One sample from a continental system encompassing the subgroups from Phytoclast

Group will be used in this 1st Exercise. In this case, it was possible to prepare a KC strewn slide (TWL), and KC and WR polished sections (RWL).

The samples will be sent up to beginning of April and the deadline suggested for the final results is May 30th.

For this exercise, all participants will receive:

- A set of samples comprising one KC strewn slide (for TWL characterization, Palynofacies analysis), one WR polished section (for RWL characterization, maceral composition), and KC polished section (for RWL characterization, correlation);
- The phytoclast classification to be applied in the case TWL with a brief description of the components;
- A guideline explaining the counting procedures;
- A counting sheet according to organic particles present in the samples that will be analyzed;
- A guideline explaining how to present the results;

Note: you can access the Exercise Proposal in the ICCP website – Commission II (http://www.iccop.org).

As in any other ICCP WG the success of the exercise depends on the massive participation in order to draw sound conclusions and therefore your participation is very important.

Please let me know your intentions as soon as possible (and what is the best address to send the samples?).

Best Regards,
João Graciano Mendonça Filho
Convener

Pollen and Spore Master Class
July 8-12, 2013
Utrecht, The Netherlands

Tentative Course Outline:

General Pollen/Spore Morphology and Taxonomy
Concepts and Applications
Early Paleozoic Palynology
Paleozoic Spore Chronostratigraphy and Paleoecology
(with special focus on Middle East plays)
Mesozoic Spore/Pollen Chronostratigraphy and Paleoecology
(Australia/New Zealand, N.W. Europe, North and South America)
Cenozoic Pollen Chronostratigraphy and Paleoecology
(North and South America, Australia/New Zealand, Antarctic)
Special Focus on Neogene Pollen Chronostratigraphy and Paleoecology
(West Africa, Southeast Asia)
Quaternary/Holocene Palynostratigraphy and Paleoecology
Fieldtrip: Type-Maastricht

Proposed Instructors: Timme Donders, Guy Harrington, Wolfram Kuerschner, Robert Morley, David Pocknall, Mercedes Pramparo, Surangi Punyasena, Jim Riding, Michael Stephenson, Paul Strother, Roel Verreussel, Thomas Demchuk

The Aims and Deliverables of the Class will be:

- Provide instruction on basic pollen/spore/algal taxonomy as an aid in identifying and classifying varied terrestrially-derived palynoflora
- Provide a general background into terrestrial palynomorph morphology, taxonomy, chronostratigraphy, paleoecology, and paleoclimate through the Phanerozoic
- Provide case studies of standard and innovative industrial applications of terrestrially-derived pollen/spore/algae to subsurface problem solving, including calibration to sequence stratigraphic modeling (system tracts)
- Each of the age specific topics and lectures will be accompanied by extensive microscope workshops
- This week-long course will include a half-day fieldtrip to the type-Maastricht in the southern Netherlands, and opening evening Icebreaker and mid-week dinner
- Maximum enrollment will be 35-40 participants
- Visit the Course website at: www.palynology.org/short-courses

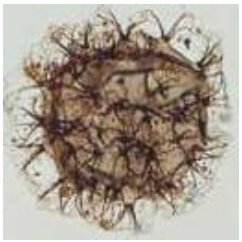
Course Fees: 300 Euros (Students), 600 Euros (Academic/Consultant), 1000 Euros (Industry)

Utrecht University

THE PALYNOLOGICAL SOCIETY

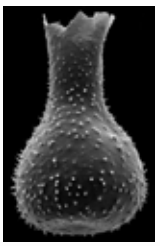
TNO innovation for life

ConocoPhillips



CIMP 2014

Ghent - Liège, Belgium



As you probably know, the next CIMP congress will take place in Belgium early July 2014 (most probably: 06th - 11th July). The conference is organized jointly by **Jacques Verniers**, at the Ghent University, and by **Philippe Steemans**, at the Liège University.

We propose the following provisional program:

Day 1: - Workshop on chitinozoans in Ghent.

Day 2: - Workshop on chitinozoans in Ghent.

Day 3: - Field trips and/or museum visit. The visit of the geological sections takes place on the path between Gent to Liège. The route is approximately 250 Km by bus. The field trips and museum visits will depend on the number of participants. The museum visit may also be done independently for those who do not want to attend the field trips (Brussels is halfway on the road between Ghent and Liege by train).

- Museum: the Royal Institute of Natural Science of Brussels is well known for its Europe's largest Dinosaurs gallery (http://www.naturalsciences.be/index_html).
- Field trip (1): the Cambro-Silurian of the Brabant Massif and the Condroz Inlier
- Field Trip (2): the Devonian from the Namur Syncline and from the Dinant Synclinorium.

- Evening ice breaker party, downtown Liège.

Day 4: - CIMP general sessions, downtown Liège.

Day 5: - CIMP general sessions, downtown Liège.

- Conference dinner, downtown Liège.

Day 6: - CIMP general sessions, downtown Liège.

- CIMP technical session, downtown Liège.
- Election of the best student poster and talk.

We will try to keep this congress as cheap as possible for all, and especially for students.

Ghent (Gent in Dutch or Gand in French) is a city of history, situated in the Flemish (=Dutch) speaking part of Belgium. During the Middle Ages, it was one of the richest and most powerful cities in Europe. It was once considered the second largest city north of the Alps, after Paris. The impact of this rich past can be clearly seen when viewing the imposing architecture of churches and the houses of rich traders. The whole of the city centre is restored in this fashion, and still breathes the atmosphere of a thriving late-medieval city state. As the city council made the centre free of cars, it is now a very welcoming and open area, which does not fail to impress even the people who live there (http://wikitravel.org/en/Ghent).

Liège (Luik in Dutch and Liège in English) has been an important city since the early Middle Ages and is situated in the French speaking part of Belgium. It was the capital of the Principality (prince-bishopric) of Liège, which remained an independent state until the French Revolution (around 1789). In the 19th century it became an early centre of industrialism. The central area of Liège presents itself as a rather interesting mix of a historic town centre, a rather elegant new town with wide boulevards, tall apartment buildings (some Art Deco) and a few pretty parks. The outskirts of Liège consist mainly of two distinctive areas: large industrial complexes sprawling on the river's bank in the north and the south (with the cities of Seraing and Herstal) and working-class areas in the east and the west with mainly green neighbourhood for healthy people. Liège is located just at the beginning of the Ardennes, which makes the landscape of the south very different than the rest of the city, with high hills and a lot of forest (Sart-tilman and beyond) (http://wikitravel.org/en/Luik).

July is summer in Belgium, but this does not mean something for the weather. It could be very hot (35°C) and dry as well as very humid and cold (15°C). July is also holidays for many people, therefore it is important to book hotels early especially for the hotels of the touristic Ghent city. Both cities have many restaurants in all specialities and price classes.

It is really easy to get to both cities by car, by train (with a high-speed train station in Liège) or by plane. The national airport is located at Brussels (Bruxelles in French) (60min train to Ghent and 60min to Liège). Take care that the Brussels South Charleroi airport is located near Charleroi and not close to Brussels. However you may reach easily the other cities by train from Charleroi: Belgium is a very small country. The Charleroi airport is an alternative for low-cost airlines. The Maastricht, Frankfurt, Lille and Luxembourg airports are also close to Belgium. There is no flight between Paris and Brussels. The connection between both capitals is best by high-speed train.

Don't forget: Keep some free space in your luggage to return with kilos of our delicious chocolate (http://www.visitbelgium.com/?page=chocolate-lovers) and some precious bottles of our famous beers (http://en.wikipedia.org/wiki/Beer_in_Belgium). Belgium contains thousands of cafés that offer a wide selection of beers, ranging from perhaps 15 in a neighbourhood café, to over 1000 in a specialist beer café (e.g. « De Dulle Griet » and « Trappistenhuis » in Ghent ; « La pierre levée »and the « Vaudrées » in Liège). There are 2445 different beers brewed in Belgium, i.e. one each 12 Km^2. If you do not believe us, go to http://www.bierebel.com/biere.php?sort=all

To prepare the congress, could you answer the following questions, and send the answers to p.steemans@ulg.ac.be ? You may cut and paste the following questions/answers in your email.

- Family and given names:
- I will come to the congress (delete proposals that do not concern you):
Surely YES – Probably YES – I do not know – Probably NO – Surely NO.
- Do you prefer to have the choice between 2 different field trips or not (delete proposals that do not concern you)?:
YES – Equal - NO
- I will participate to (delete proposals that do not concern you):
Chitino workshop – field trip 1 - field trip 2– Ice breaker – CIMP general sessions – Conference dinner.

Jobs and Education News and Updates

https://vacancies.gns.cri.nz/jobdetails?ajid=Uggj7

Marine Palynologist

We are seeking an experienced marine palynologist with an interest in applied biostratigraphy, paleontological research and project management. The successful candidate will have:

- A doctoral degree in geosciences, specialising in dinoflagellates, spores and pollen and palynofacies.
- A proven track record of conducting, completing and publishing research.
- 5 years or more of leadership experience in multidisciplinary stratigraphic studies.
- Experience in working for the petroleum exploration industry as a stratigrapher.
- Proven ability to work with other biostratigraphers, sedimentologists, petrophysicists and seismic interpreters to provide integrated geoscience solutions.
- Familiarity with seismic interpretation.
- Excellent skills in computing and written and verbal communication.
- A demonstrated ability to keep a clear business focus - making decisions, and technical recommendations with a business mindset and prioritizing work accordingly.
- Coaching and mentoring experience.

Main roles will be:

- To carry out well post-drill assessments, well correlations, palynofacies studies and provide regional study input, and research and development of new and existing palynozonal schemes.
- To co-ordinate stratigraphic aspects of multidisciplinary sedimentary basin studies, covering a broad range of disciplines (bio-, chrono-, litho-. cyclo-, seismic-stratigraphy).
- Data integration and interpretation working closely with sedimentologists and seismic interpreters in developing sequence stratigraphic models.

This position will be based within the Department of Paleontology, Geological Resources Division in Lower Hutt. The candidate will be working alongside experts in her/his field. GNS Science is a Crown-owned research institute and also a leading provider of consultancy services to industry, with a particular focus on regional petroleum prospectivity and exploration. Our large team of stratigraphers is engaged in a diverse range of consultancy and research projects, particularly those related to resources exploration and CO2 storage in the New Zealand region, and global climate change research in the Southwest Pacific Ocean and Antarctica. We have close research links with all major universities in New Zealand and many overseas institutions.

Applications close Sunday 2 June 2013 at 9pm NZ time

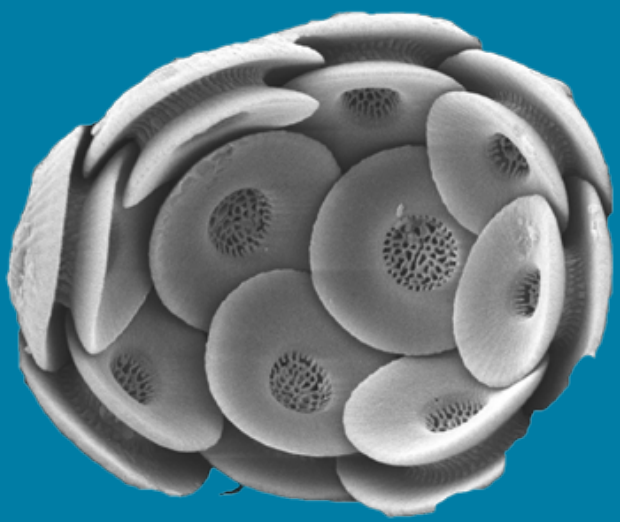
Job Details

Reference #	4617
Posted on	Apr 29, 2013
Closes on	Jun 2, 2013
Location(s)	Avalon, Lower Hutt
Expertise	Geosciences
Job Level(s)	Experienced
Work type(s)	Permanent full time
More details (document)	Marine Palynologist Position Description.doc

UNIVERSITY OF BIRMINGHAM

One academic year full-time

MSc in Applied and Petroleum Micropalaeontology



‘Micropalaeontology plays a fundamental role in hydrocarbon exploration, providing the main method of dating geological sequences during the exploration for oil and gas. It also underpins many academic studies of past climate change, giving us both qualitative and quantitative evidence for past climatic conditions on earth as far back as 500 million years.’

Dr Ian Boomer, Course Director

Challenge what you know.

MSc in Applied and Petroleum Micropalaeontology

Key Features

- Comprehensive coverage of the key microfossil groups used in hydrocarbon exploration
- Focus on the role of microfossils in understanding major changes in global climate
- Course taught by both academic staff and industrial partners
- Opportunity to experience working with geological consultancies as well as an academic research environment
- Individual research project tailored to your own skills and goals

Who is this course aimed at?

Although primarily aimed at Earth Science graduates who wish to gain expertise in Micropalaeontology and Petroleum Geoscience, the course has the flexibility to engage with students from a variety of academic backgrounds and would also suit those with experience in related Geoscience disciplines.

How is this course structured?

The course is delivered through a series of taught modules focusing on the key microfossil groups and their applications in the first semester, which are preceded by a short UK-based field trip to collect samples. In the second semester, students will normally take additional courses to broaden their understanding of petroleum geology and sedimentary basin analysis while undertaking independent research projects.

Taught modules offered include:

- Foraminifera
- Calcareous Nannofossils
- Ostracods
- Pollen and Spores
- Dinoflagellates
- Sedimentary Basin Analysis
- Petroleum Geology
- Micropalaeontological Skills and Industrial Case Studies

Assessment

120 credits are assessed through taught modules, 60 credits are awarded following the successful completion of the independent project, which is assessed through a written dissertation. A variety of assessment methods are used, ranging from written coursework, case study reports, oral presentations and standard examinations. The independent research project is assessed through a written dissertation.

Careers

The course is primarily designed to prepare students for work in the hydrocarbon industry and related service sector; this may involve both onshore and offshore work in the UK, in Europe and worldwide. The research skills acquired will also provide a strong foundation for those wishing to undertake further postgraduate study towards the award of a PhD.

How to Apply

The quickest and most efficient method is to apply online. For further instructions on how to do so, please visit www.apply.bham.ac.uk. This allows you to complete the application process at your own pace, using our 'save and return' option.

Fees and Funding

For the latest fees and funding information please visit www.birmingham.ac.uk/students/fees/postgraduate

SCAN ME

www.birmingham.ac.uk/msc-micropalaeontology

Learn more

Course Director:
Dr Ian Boomer
Tel: +44 (0) 121 414 5536
Email: micropalaeontology@contacts.bham.ac.uk

Course Administrator:
Mrs Gillian Burrows
Tel: +44 (0)121 414 2628
Email: g.burrows@bham.ac.uk

School of Geography, Earth and Environmental Sciences
University of Birmingham
Edgbaston, Birmingham
B15 2TT, UK

OBITUARY

NURIA SOLÉ SANROMÁ
Ph.D.

June 22 1925 - May 2 2013

Nuria Solé Sanromá (although she always signed her publications as Nuria Solé de Porta), Ph.D., palynologist, born in Constanti (Tarragona, province of Cataluña, Spain), long-time resident of Barcelona, passed away on May 2, 2013 at the age of 87.

She was a well-loved, highly-respected international figure in the palynological community. She received her Ph.D. from the Universidad de Barcelona in 1970. She taught at Universidad Industrial de Santander in Bucaramanga (Colombia), Universidad de Salamanca and Universidad de Barcelona (Spain).

In the sixties, she lived several years in Colombia where she worked with the Colombian Geological Survey, and helped together with her husband, professor Jaime de Porta, create a new program in Geology at the Universidad Industrial de Santander in Bucaramanga, a program that it is still active.

She went back to Spain in the early seventies joining the faculty at Universidad de Salamanca and later on the Universidad de Barcelona, where she taught until her retirement in 1995.

She was a founding member of APLE (Asociación de Palinólogos de Lengua Española) since 1978, and was APLE vicepresident for several years. Nuria published extensively on a broad range of topics and regions, from the palynology of the Cretaceous, Cenozoic and Quaternary of Colombia and Argentina, to the Triassic-Quaternary geology, biostratigraphy and paleoecology of multiple European regions, mostly Spain.

She was always eager to help fellow palynologists and numerous generations of students. She will always be remembered.

Carlos Jaramillo