



Newsletter

October 2012

No. 80



An example of the flora that grows for a short time at 12-13,000 feet above sea level in the Indian Himalaya (photo H Sinha)

Commission Internationale de Microflore du Paléozoïque

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CONTENTS

Message from the President	2
Message from the General Secretary	2
Palynology position Geoscience Australia	3
Devonian-Carboniferous Symposium in honour of Geoff Clayton and Ken Higgs, 45 th Annual meeting of the AASP, Lexington, Kentucky	4
England Finder Calculation (EFC): a new software for palynologists	9
PhD abstract of Janine Pendleton, University of Sheffield	10
Future meetings and conferences	11
News from the membership	12
The CIMP website	13
CIMP Fees	13

MESSAGE FROM THE PRESIDENT

Dear CIMP members,

Here we are with our 2012 summer newsletter, issued this time with some (minor) delay. I want to thank all the people who are contributing, putting some of their precious time for the benefit of CIMP.

I think that one of the most exciting things about working as a palynologist (especially in the Precambrian and Palaeozoic!) is that we have the opportunity of being confronted almost on a day to day basis to new “things”: look at a palynological assemblage from a new locality, even in a previously studied area, and you will be confronted with at least a few specimens which you will not be able to assign, not only to known taxa, but sometimes even to known groups of palynomorphs! Someone could see this as a frustrating difficulty: what to do with those “weird things”? But I prefer to consider it as a fantastic opportunity to keep our minds open, continuously challenging our knowledge, our “experience” and our pre-formatted mental schemes. In the past, a few members have sent pictures of “problematic” palynomorphs to be published in this Newsletter, and I would like to invite you to continue to do so: check your forgotten set of pictures, dig out that strange specimen and share it with us!

The visibility of CIMP at international level was reinforced this year by the presence of CIMP-sponsored sessions at two major international palynological congresses: The “Symposium SS39: Precambrian to Palaeozoic Palynology: the state of the art”, at the XIII International Palynological Congress in Tokyo, and the “Devonian – Carboniferous Symposium in Honour of Geoff Clayton and Ken Higgs” during the 45th Annual Meeting of AASP – The Palynological Society, held in

Lexington, Kentucky, USA. We will report on the former meeting in the next issue of the Newsletter, while you will find a detailed report on the very successful CIMP Symposium of Lexington in these pages. Personally, I could only attend the meeting in Lexington; this was an excellent meeting with very interesting presentations (ranging from Precambrian to Quaternary), stimulating discussions, and fantastic pre- and post-conference field trips to Devonian and Carboniferous localities of northeastern Kentucky. I was somewhat surprised that many palynologists from North America did not even know about the existence of CIMP! However our society has been around much longer than, for example, AASP! So, I once again underline the importance of participating to international scientific meetings (not only palynological ones) with thematic sessions, which can be presented under the CIMP label. This hopefully will attract new members and keep CIMP alive and kicking.

Marco Vecoli
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MESSAGE FROM THE GENERAL SECRETARY

Included within this issue you will find Reed Wicander’s summary of the symposium held in honour of Ken Higgs and Geoff Clayton at the 45th Annual AASP meeting in Lexington in July. Also to be found are a method of computing England Finder coordinates by Felipe González, the abstract of Janine Pendleton’s recent PhD thesis and other news from our members including new PhD students and publications. Many thanks to all of you who have contributed and please keep the articles coming – submissions for the next newsletter are already very welcome. Thanks!

Gary Mullins
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PALYNOLOGY POSITION: GEOSCIENCE AUSTRALIA

Role Profile - Senior Palynologist (Ref: 17038)

Role Description: The Energy Division (ED) is seeking an experienced and innovative Palynologist to take a dynamic leadership role in stratigraphic framework studies of Australian Basins, within the Basin Resources Group. A primary output of the Group is the geoscience data that underpins the annual offshore petroleum release. This is an ongoing appointment offering excellent opportunities for promotion and applied research. You will have demonstrated skills in dinocyst and/or spore pollen taxonomy; its application to sequence stratigraphy and palaeo-environmental interpretations, as applied to resource exploration. You are aware of ongoing work in the Global Timescale project and understand the implications to existing palynozones and biostratigraphic data sets. It is essential that you are skilled in using digital methods for capture, handling, presentation, and interpretation of palynological data. Previous experience working for a petroleum exploration company would be an advantage, as would be an existing network of key scientists in the field of biostratigraphy.

Role Duties: You will engage in a range of activities including:

- timescale research, with an emphasis on systematic study of palynofloras
- interpretation of previous palynological studies
- the design, execution, and delivery of sampling and palynological research studies to assist Geoscience Australia's regional projects.

Special Requirements: PhD in palynology or demonstrated contemporary and relevant industry experience. The successful candidate will undertake travel to national and international meetings, as required.

Key Relationships: Reporting to the Section Leader of Acreage Release, Prospectivity Products and Promotion. This position requires a team player, to work with project teams within Geoscience Australia, and to liaise with Industry and to work, where necessary, with external science providers in a collaborative way.

Additional details including selection criteria can be found at <http://www.ga.gov.au/jobs/current-vacancies.html>

Contact Officer: Dr Clinton Foster (Chief Scientist)

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This position is based in Canberra. Closing date 21/10/2012.

DEVONIAN – CARBONIFEROUS SYMPOSIUM IN HONOUR OF
GEOFF CLAYTON AND KEN HIGGS
45TH ANNUAL MEETING OF AASP – THE PALYNOLOGICAL SOCIETY
UNIVERSITY OF KENTUCKY, LEXINGTON, JULY 21 – 25, 2012

As part of the 45th Annual Meeting of AASP – The Palynological Society, held at the University of Kentucky, Lexington, Kentucky, a special CIMP-sponsored symposium was held on July 24, 2012, honoring Geoff Clayton and Ken Higgs (Figure 1) for their many contributions during the past 30+ years to the field of Late Paleozoic palynology (Figure 2). The entire Tuesday oral technical sessions were devoted to talks concerning various aspects of Devonian – Carboniferous palynology.



Figure 1: Ken Higgs and Geoff Clayton, taking a well-deserved afternoon break during the 2009 CIMP Faro'09 post meeting field trip (photo courtesy of Bruno Rodrigues).



45th Annual Meeting of AASP – The Palynological Society
University of Kentucky, Lexington, KY
July 21 – 25, 2012

Conference Co-Hosts

Cortland F. Eble, *Kentucky Geological Survey*
Jennifer M.K. O'Keefe, *Morehead State University*

Devonian – Carboniferous Symposium in Honor of Geoff Clayton and Ken Higgs
Co-chaired by Zélia Pereira and Reed Wicander



Geoff

A CIMP-sponsored symposium will be convened at the Lexington meeting in honor of Dr. Geoffrey Clayton and Dr. Kenneth Higgs. For more than three decades, Geoff and Ken have made tremendous contributions to our understanding of Late Paleozoic palynology. Lexington, surrounded by Late Paleozoic age strata, is a perfect venue to celebrate their contributions to late Paleozoic palynology!



Ken



Figure 2: Announcement of the CIMP-sponsored Devonian – Carboniferous symposium in honor of Geoff Clayton and Ken Higgs.

CIMP Newsletter 80

The session began with the official opening of the symposium by Zélia Pereira, followed by a light-hearted, and humorous introduction of the honorees by Reed Wicander in which he said that “unlike Mark Anthony in Shakespeare’s play Julius Caesar, we have come together today, not to bury Geoff Clayton and Ken Higgs, but to praise them, for all their many contributions to Devonian–Carboniferous palynology and the numerous students they have mentored and trained during their long and distinguished academic careers. And no, it is not any evil that Geoff and Ken have done that will live after them, but the good that will serve as their enduring legacy” (Figure 3).



Figure 3 Reaction of the honorees, Ken Higgs and Geoff Clayton, along with David Pocknall, to Reed Wicander’s humorous introduction to the symposium (photo courtesy of Gilda Lopes).

As if that wasn’t enough, Reed followed with a slide of various Greek gods and intoned that “during the past three decades, Geoff and Ken have been God-like, and almost mythical figures to most of us as they sit on high on the throne of palynology on Mount Olympus. They have set the bar high for the rest of us, and made many important contributions to palynology. And for that, like the rest of us mere mortals, they must endure this tribute to their accomplishments.”

Zélia then read an overview of Geoff’s accomplishments (Figure 4), and showed several pictures of Geoff over the years. Reed followed with an overview of Ken’s accomplishments (Figure 5), as well as several photos of a ‘younger’ Ken.



Geoff Clayton a Life Committed to Science and Education

Since earning his PhD in Sheffield in the early 1970s, and throughout his long and illustrious career as a professor at Trinity College, Dublin, Geoff Clayton has mentored and advised numerous students, as well as maintaining the highest standards and productivity in palynology and organic petrology. As is evident from his long list of publications, he has developed a wide variety of projects throughout the world that include Ireland, Bolivia, Portugal, Jordan, Saudi Arabia, and the USA.

One of the enduring legacies of Geoff's long and meritorious career has been the worldwide promotion of Palaeozoic palynology, with a strong link to industry. This legacy is marked by his outstanding high quality scientific papers, and the many students who currently work in the petroleum field.

GC also has a spirit of mission and dedication to palynology as seen by his active role in the profession. To wit, he was Secretary-General of CIMP (from 1983–1987), then he became President of CIMP for a decade during the 1990s, and also served as councilor of the IFPS (International Federation of Palynological Societies). More recently, he was the Vice-Chair of the Subcommittee for Carboniferous Stratigraphy (2000–2008).

Geoff has further distinguished himself by receiving several awards from Trinity College, Dublin, and he is an important Member of the Royal Irish Academy.

Although much more could be said, this brief testament summarizes his more than three decades of contributions as a prominent key figure of CIMP and Palaeozoic palynology.

Thanks Geoff, for all of your many contributions.

Figure 4: An overview of Geoff Clayton's career.



Ken Higgs a Life of Accomplishment in Science and Education

Ken earned his PhD in Geology (Palynology) at the University of Sheffield in 1975, spent the next 11 years in the Geological Survey of Ireland, and then began his academic career at University College Cork in 1986, remaining there until his retirement as an Associate Professor this year.

Ken's principal area of research is palynology, and in particular, the application of palynology in biostratigraphy, evolution, and palaeoenvironmental studies. He established a Palynology Research Laboratory at UCC and mentored and trained numerous students over the years.

In recent years, Ken has developed a strong research interest in the evolution of Devonian and Carboniferous terrestrial ecosystems that is multidisciplinary in nature. His current research projects reflect his global outlook and include field sites from various continents.

Ken has published more than 75 scientific publications since his first paper was published in 1974! Many of these are seminal studies that have stood the test of time, and become classics in their own right.

Ken has also been active in the palynology/geology profession, including being a founding member of the Cork Geological Association, an active member of the Irish Geological Geoheritage, as well as CIMP, where he has served as a past-president of the CIMP Spores and Pollen Subcommittee.

Much more could certainly be said about all of Ken's many accomplishments. However, we must limit ourselves to this brief summary of Ken's 30 plus years of service to Palaeozoic palynology and the education of the next generation of palynologists.

Thanks Ken, for all you've given us over the years.

Figure 5: An overview of Ken Higgs's career.

CIMP Newsletter 80

Zélia and Reed then took turns reading the numerous letters of congratulations, stories, and anecdotes sent in by Geoff and Ken's numerous students, friends, and colleagues. These were accompanied with more photos of the honoree's and the contributors. The introduction finished (probably mercifully for Geoff and Ken) with some concluding remarks thanking them for all their contributions and service over the years (Figure 6).



Concluding Remarks

We all have learned a lot from both of you and your solid experience, in particular in Devonian—Carboniferous Palynology;

The high-quality experience in the field gave both of you a solid background knowledge that was consolidated by the excellency in your academic and scientific career achievements;

Also, your friendly personality and amazing sense of humor captured the attention of the most distracted students and easily promoted the establishment of good friendships, among students and worldwide professionals;

Although we clearly know that both of you don't love this sort of honoring, for us it was the way we found to thank you for all you gave us!

Thanks!!

Figure 6: Concluding remarks thanking Geoff and Ken for all their many accomplishments during the past 30+ years.

The two morning sessions saw eight presentations made, covering various aspects of Devonian and Carboniferous palynology, and ranging over such far-flung areas as the United States, Colombia, Saudi Arabia, Libya, Portugal, and Russia. The afternoon session had four presentations, including such diverse topics as the 'Palynologic Darkness Index,' of Mississippian palynomorphs heated by an igneous intrusive, a palynologic, geochemical, and sequence stratigraphic interpretation of black shale deposition on a carbonate platform in the Aran Islands, Ireland, and palynologic characteristics of coal beds in Northeastern Kentucky.

The symposium ended with a brief summary of the proceedings, thanking of the speakers, and some final remarks concerning the honorees by the co-chairs Zélia Pereira and Reed Wicander.

At the conclusion of the morning session, Geoff and Ken probably hoped the jokes and accolades were now behind them, but this was not to be. As part of the AASP luncheon, a 'friendly roast' of Ken and Geoff took place in which several humorous stories (not appropriate for the morning introduction) sent in by former students and colleagues were read by Reed.



Figure 7: Reed relating Ken's fare-dodging escapades with of photo of the wanted poster in the background (photo courtesy of Mike Lynch).



Figure 8: Reed holding the Lifetime Achievement Oscars that were presented to Geoff Clayton and Ken Higgs in recognition of their contributions, support, and promotion of Late Paleozoic palynology (photo courtesy of Mike Lynch).

It was also pointed out by a former student of Ken that he is a notorious fare dodger, and is wanted by transportation police throughout the world. A copy of the wanted poster hanging in many police stations was presented to Ken (Figure 7). In addition, Geoff and Ken were each presented with a Lifetime Achievement Oscar (Figure 8) from the Motion Picture Academy for their enduring contributions, support, and promotion of Late Paleozoic palynology, an honor only once previously bestowed on Geoff Playford on the occasion of his retirement. The luncheon's festivities concluded with a well-deserved and well-earned standing ovation of applause in honor of Geoff Clayton and Ken Higgs.

Reed Wicander
Zélia Pereira

Details of the program and abstracts of this meeting are available in a special issue of the AASP – The Palynological Society Newsletter, which can be downloaded by following this link: <http://palynology.org/repo/file/newsletters/SI-1.pdf>

ENGLAND FINDER CALCULATOR (EFC): A NEW SOFTWARE FOR PALYNOLOGISTS FELIPE GONZÁLEZ

Finding and relocating on a microslide a point of interest previously referenced with another microscope has always been problematic because microscopes equipped with mechanical stages and Vernier scales rarely have the same configuration. As a result, a microscope reading can be positively used only with the same model of microscope, or at best, with other models of the same company. A good, if not the best alternative has been the usage of the so-called finder, a microslide gridded with an independent reference system that can provide universal readings to be used in all kinds of microscopes (if incorporating mechanical stages).

The best accepted finder among palynologists and the one most broadly used when providing coordinates of the published material is the England Finder. However, this and the other existing finders, have a serious limitation because microscopists need to continuously replace finder and sample slide whenever a point of interest needs to be referenced or relocated. This obviously represents a significant time-consuming task.

The England Finder Calculator (EFC) is a new software tool developed to overcome this problem. It easily and expeditiously transforms X/Y coordinates of any given microscope stage into England Finder coordinates, and vice versa. The EFC does not require in any case the usage of the England Finder slide, it only needs the introduction of the coordinates of some predefined control points. These readings are used by the software to generate a calibration file specific to each microscope. Once this calibration file is generated (a step that needs to be done only once per microscope) and loaded, the EFC works as a simple converter between the given microscope and the England Finder reference system.

The EFC is a VB.NET application supported by the most commonly used Windows platforms. Versions compatible with Mac OS and Linux are still in development. The website <http://www.uhu.es/efc> offers the EFC software at no cost, together with additional information regarding its usage, main features and limitations. A recent paper in Marine Micropaleontology (González, 2012) offers a more comprehensive evaluation of EFC, and includes a section with the mathematical background supporting it. In summary, the EFC is a

CIMP Newsletter 80

user-friendly software tool that can help palynologists, as well as other microscope users, to relocate points of interest on a microslide in an easier and faster way. This tool can definitely push for the universal usage of the England Finder coordinate system.

Reference:

González, F. (2012). Software for universally relocating specific points of interest on microscope slides, *Marine Micropaleontology*, 96-97: 63-65.

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PHD ABSTRACT OF JANINE PENDLETON PALYNOLOGICAL AND PALAEOBOTANICAL INVESTIGATION OF THE CARBONIFEROUS DEPOSITS OF THE BRISTOL COALFIELD, U.K.; BIOSTRATIGRAPHY, SYSTEMATICS AND PALAEOECOLOGY. UNIVERSITY OF SHEFFIELD

This multi-disciplinary study of the Pennsylvanian-aged Warwickshire Group of the Bristol Coalfield presents the first secure biostratigraphical dating of this historically contentious sequence. Stratigraphical revisions and reinterpretation also enable accurate infrabasin correlation between the Coalpit Heath Syncline and the southern limb of the Kingswood Anticline. Using newly produced palynological (miospores and megaspores) and palaeobotanical biozonations the Winterbourne Formation and Downend Member are mid- to late Bolsovian in age, featuring assemblages corresponding to the SL palynological Biozone and the *Laveineopteris rarinervis* palaeobotanical Sub-Zone. The base of the Asturian, roughly approximating the base of the OT Biozone, occurs within the lowermost 120m of the Mangotsfield Member; the uppermost division of the Pennant Sandstone Formation. A stratigraphical gap is highlighted, for the first time, between the Pennant Sandstone and Grovesend formations, encompassing the early to mid-Asturian (absent *Linopteris obliqua* palaeobotanical Biozone and *Lobatopteris micromiltonii* palaeobotanical Sub-Biozone assemblages). This correlates to similar hiatuses in both nearby coalfields and several European basins, related to the Leonian Phase of uplift (part of the Variscan Orogeny). Both palynological and palaeobotanical data sets are interpreted within a facies context, to highlight a diverse patchwork of plant communities. Bolsovian peat mires were dominated by lepidodendrids and ferns, and were replaced by tree fern and fern mires in the late Asturian, likely due to uplift-induced alterations in drainage. High diversity pteridosperm, sphenophyte and fern clastic swamps fringed and infiltrated these mires. Bolsovian to early Asturian braided fluvial systems created disturbed riparian niches that were colonised by low diversity pteridosperm-sphenophyte communities and *Sigillaria*-sphenophyte-fern-cordaitalean communities. High levels of cordaite pollen adds to the growing body of evidence that these plants were not merely restricted to “upland” areas. Evidence suggests that marattialean tree ferns may have originated within clastic environments within the Bolsovian, before becoming dominant members of Asturian peat mires.

Janine Pendleton
Petrostrat Ltd

FUTURE MEETINGS AND CONFERENCES

**46th ANNUAL MEETING OF THE
AASP – THE PALYNOLOGICAL
SOCIETY**

**October 20 – October 24, 2013
San Francisco**

A joint meeting with Dino10, the Canadian Association of Palynologists (CAP), and the North American Micropaleontology Section of SEPM (NAMS).

For more information visit:

<http://www.palynology.org/upcoming-aasp-meetings>

**4th INTERNATIONAL
PALEONTOLOGICAL CONGRESS**

**The history of life: a view from the
Southern Hemisphere**

**September 28 – October 3, 2014
Mendoza, Argentina**

The 4th IPC will be held in Mendoza, Argentina and will be chaired by Claudia Rubinstein. The 2014 annual meeting of the AASP-TPS will also occur in conjunction with the 4th IPC meeting.

More details can be found by following this link: www.ipc4mendoza2014.org.ar

**9th European Palaeobotany Palynology
Conference**

26 – 31 August, 2014, Padova, Italy

Padua (Padova in Italian) is a picturesque, historic city in Northern Italy (about 40 km west of Venice), with a dense network of arcaded streets, large communal “piazza”

(squares) and many bridges crossing the various branches of the Bacchiglione. It hosts the almost 800 years-old Università di Padova, which is famous for having had Galileo Galilei among its lecturers.

For more information visit:

<http://www.geoscienze.unipd.it/9th-european-palaeobotany-palynology-conference>

**2014 CIMP General Meeting
Ghent and Liège, Belgium**

Date to be confirmed

Jacques Verniers and Philippe Steemans have proposed holding the 2014 CIMP General Meeting in Ghent and Liège, Belgium. The exact dates are to be confirmed, but it is suggested that the meeting is held in late June or early July so as not to conflict with the 4th IPC in Mendoza, Argentina. A five day meeting including pre-conference workshops and field/museum visits as well as a three day scientific session is planned.

**14th International Palynological
Congress**

Salvador de Bahia, Brazil, 2016

Date to be confirmed

During the 13th International Palynological Congress in Tokyo in late August the IFPS councillors voted to hold the 14th IPC in Brazil. This will be the first time that the IPC will be held in South America.

NEWS FROM THE MEMBERSHIP

H N Sinha (Vinoba Bhave University, Hazaribag-825301, India) has completed geological field work in the Lower Paleozoic sequence of the Tethyan Himalaya, India during the last summer and is looking for Chitinozoa and acritarchs in the collected samples.

Recently, one new species of Melanosclerites from the Lower Paleozoic sequence of the Garhwal Tethyan Himalaya was published and the reference is as follows:

Claudia, Trampich and Sinha, Hareshwar N. 2011. A new melanosclerite *Melanosteus indica* nov.sp. (?Cnidaria) from the Shiala Formation of the Garhwal Tethyan Himalaya, India. *Micropaleontology*, v.57, pp.531-535.

Thomas Servais reports that two new PhD students will start at Lille1, UMR Géosystèmes CNRS, on October 1st, 2012. Chloé Amberg will start a PhD under the supervision of Thijs Vandenbroucke on Ordovician climate reconstructions using zooplankton distribution models. Hendrik Nowak will start a PhD under the supervision of Thomas Servais on Cambrian-Ordovician palynology of the Fossil-Lagerstätten.

Mohammad Ghavidel-Syooki (Institute of Petroleum Engineering, Technical Faculty of Tehran University) has published two new papers on the Ordovician and Silurian of the Zagros and Alborz mountains of Iran.

Mohammad Ghavidel-Syooki, Jamshid Hassanzadeh and Marco Vecoli. 2011. Palynology and isotope geochronology of the Upper Ordovician–Silurian successions (Ghelli and Soltan Maidan Formations) in the Khoshyeilagh area, eastern Alborz Range, northern Iran; stratigraphic and palaeogeographic implications. *Review of Palaeobotany and Palynology*, 164, 251-257.

Mohammad Ghavidel-syooki, J. Javier Álvaro, Leonid Popov, Mansoureh Ghobadi Pour, Mohammad H. Ehsani and Anna Suyarkova. 2011. Stratigraphic evidence for the Hirnantian (latest Ordovician) glaciation in the Zagros Mountains, Iran. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 307, 1-16.

THE CIMP WEBSITE

Philippe Steemans has been very ably fulfilling the role of both CIMP Treasurer and Webmaster for a number of years, but wants to stand aside as Webmaster. We are therefore looking for someone to take on the responsibility of managing our very professional looking (many thanks Philippe!) webpages (see <http://cimp.weebly.com/index.html>). Please submit your nominations or feel free just to volunteer. Contact me, Marco Vecoli or Philippe Steemans.

Thank you.

Gary Mullins

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CIMP FEES

Please don't forget to pay your annual CIMP subscription. Information on methods of payment can be found at <http://cimp.weebly.com/membership.html>. It is easy, but why pay? Simple - you may help CIMP members (mainly students) to participate to congresses. You may help in organizing social events during meetings. You may participate to discussions between CIMP members. You provide the fees for the CIMP subscription to IFPS (International Federation of Palynological Societies).

Thank you!