Note of the Secretary-general

This september we will have our next C.I.M.P. Symposium in Sheffield, U.K. and the attendance and proposals for presentations, excursions and workshops are very promising. The second Circular of the Symposium is included in this Newsletter.

As with the previous newsletter, a new issue is added of the Acritarch Newsletter (N° 5) and the Chitinozoa Newsletter (N° 13) for the members of the two subcommissions. Several persons who did not receive them in november are now on the list. If those newsletters are not included and you are interested in receiving those, please contact the C.I.M.P. secretary **and** ask the contact persons of the subcommissions to be added to their mailing list.

I would like to thank the twelve colleagues who have responded to my call for the new addresses of C.I.M.P. members whose Newsletters were returned to sender by the post (eight colleagues could be relocated).

Included in this newsletter are the abstracts on Precambrian, Palaeozoic and Triassic subjects presented at the A.A.S.P. meeting last october in Baton-Rouge, USA. We also announce the content and authors of the A.A.S.P. 25th anniversary publication edited by J. Jansonius and C. Mc Gregor: **"Palynology: principles and applications"**, that should be ready after this summer.

It is now five years ago that our previous Secretary-general made an up-to-date list of all the C.I.M.P. members. In preparation of our General Assembly in september 94 I would like to ask everyone to return the form (attached) to confirm your interest in continuing to be a C.I.M.P. member. Those who want to receive the bi-annual I.F.P.S. revue "Palynos" via the C.I.M.P. should also mark this on the form. The C.I.M.P. constitution states clearly that **"members of C.I.M.P. shall be all palynologists who desire to belong to C.I.M.P."**. However after sending out each Newsletter about 10 to 15 are returned to sender. An actualization of the list of C.I.M.P. members every five years is therefore needed. Please indicate if you can be reached by E-Mail. Sending the Newsletter by E-mail will cut a lot on the costs of copying and posting. The next issue (november 1994) will still be sent to everyone on the present list. In 1995 only those who returned the form, will continue to be C.I.M.P. members and receive the Newsletters.

We would like to urge the C.I.M.P. members to pay the small annual contribution, because the contributions that we received the last few years (about 15% of all the members) did not cover at all the costs for photocopying and posting the Newsletter. The issue will be discussed during the General Assembly. We would like to thank the two new regional contact persons who offered to collect the C.I.M.P. contributions in their country or region (Christoph Hartkopf-Fröder for Germany, and Gordon Wood for the U.S.A. and Canada). More offers are welcome.

As announced in our last Newsletter we will have a C.I.M.P. General Assembly in the evening of the 7th september 94 in Sheffield during the next C.I.M.P. Symposium, with on the agenda:
- the accounts 91-94, the financial situation and strategy for its amelioration.
- affiliation with the I.F.P.S. (and financial implication)
- future plans and activities of the C.I.M.P.
- varia.

Persons wanting to add points on the agenda can contact the secretary.

Commission Internationale de Microflore du Paléozoique

NEWSLETTER 46 15 April 1994

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Content Newsletter 46 (15 april 1994)

page(s)

Please return the form confirming your wish (to continue) to be a C.I.M.P. member!

Selection of C.I.M.P. related abstracts of the **26th Annual Meeting of the American Association of Stratigraphic Palynologists**, October 1993, Baton Rouge, Louisiana, U.S.A.

The Dependence of the Lateral Distribution of Westphalian A and B Palynofacies upon their Continental Sedimentary Context

Martine Hardy and Marc Roche

Services associés de paléontologie de l'Université de Liège, Belgium

Organic matter was extracted and analyzed from samples of siliciclastic rocks cored in the Westphalian A and B of the Campine Coal Basin (Belgium).

The original aim of this work was to sample every lithology in the sedimentary sequence of the Westphalian delta lake, lake bottom, channel fill and floodplain deposits.

Our goals were to determine (1) whether the organic matter content could be used to distinguish comparable lithologies of siliciclastic continental sediments derived from different environments of deposition and (2) whether the organic matter content varies with the lithology within a given depositional environment.

The investigation of organic matter aims at determining the relative proportions and concentration of the sporamorphs, peculiarities of the palynofacies, and taxonomic diversity indices.

The results of numerical tabulations have been submitted to multivariable statistical analysis including principal component analysis, Spearmans rank order correlation coefficients, forward and backward stepping multiple regression, means and standard deviations.

We pointed out the prominent role played by the lithofacies in the organic content of siliciclastic sedimentary rocks from continental environments.

The fluvial system is of course the main collecting and transporting agent, but also mixes microspores and other particulate organic matter from different ecosystems.

The lateral distribution of allochtonous organic matter until depositional paleoenvironments is bounded by a differential sorting effect at the time of sedimentation.

The proportion of fine-grained sediments and miospores decreases from shales to sandstones. Black and brown organic clasts become proportionally more abundant in sandstones, and because their size range varies widely, some are also larger than clasts in fine grained sediments.

Moreover, the miospores are probably not differentially affected by the sedimentary sorting: They just act like fine particles of similar density. Therefore, a wide variety of allochtonous taxa occur in the siliciclastic lithofacies encountered in continental depositional environments.

Palynofacies analyses permit the differentiation of two types of lake bottom deposits that are identical from a sedimentary point of view.

The newly defined lake bottom subenvironment is a thin shale bed developed right above coal-beds. It is characterized by a high percentage of amorphous matter and a significant number of miospores. These sediments were probably influenced by autochtonous miospores produced by coal-forming plant communities.

Poster Display

Miospores of the Wapsipinicon Group (Middle Devonian) of Iowa

Curtis R. Klug

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The Wapsipinicon Group was named for strata lying between the underlying Ordovician or Silurian rocks and the overlying Cedar Valley Group, the basal beds of which are Givetian in age. The Wapsipinicon is divided into six members within four formations. Samples were collected and processed for miospores from surface and subsurface sections of the Wapsipinicon Group throughout its areal extent in the eastern half of Iowa. Wapsipinicon strata are dominated by carbonates, but terrigenous clastics are important locally. With few exceptions, the strata are nonfossiliferous and interpreted to have been deposited in restricted marine to non-marine environments. Well-preserved miospores, however, have been recovered throughout the group and from a variety of lithologies. Miospore abundance varies considerably from sample to sample, but is often low, requiring large samples to obtain adequate miospore floras. Surprisingly, relatively pure dolostones and limestones are often much more productive than strata containing higher percentages of terrigenous detritus. Miospore diversity also varies from sample to sample, but overall diversity is relatively high. Miospore genera recovered from the Wapsipinicon include: *Ancyrospora*, *Dibrochosporites*, *Emphanisporites*, *Geminospora*, *Grandispora*, *Perotriletes*, *Retusotriletes*, *Rhabdosporites*, and *Stenozonotriletes*. Conodont data suggests an age of late Eifelian at the base of the group to early Givetian at the top. The miospores, however, suggest that the base of the group is no older than early Givetian. The reasons for the discrepancy are unclear, but range extensions for several important conodont and/or miospore species may be indicated.

Time: 3:40 p.m., Monday, October 25

The Uniformitarian Dogma "The Present Is the Key to the Past" Is No Longer Suitable for Geological Science

Gerhard O. W. Kremp

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The question is raised: Why do so many geologists - mostly in English-speaking countries - reject presentations of the Earth expansion theory? Perhaps these scientists follow the traditional dogma of Sir Charles Lyell's Law of Uniformitarianism established in 1830. Lyell had derived his dogma from the Four Laws of Uniformitarianism, signed in 1662 by King Charles II.

Religious brother-wars had raged in England around 1646. On the one side was King Charles I with his army and his conviction of the correctness of the dogma of the Anglican Church. On the other side were the Calvinistic Puritans and the armies led by Oliver Cromwell. In 1648 the war was won by Cromwell, and in January 1649, Charles I was executed. Finally, in 1660, the oldest son of Charles I succeeded in his desperate struggle against the Puritans and became King Charles II. In order to prevent further religious brother-wars, he instituted the Four Laws of Uniformitarianism in 1662, for the purpose of establishing religious peace. These laws confirm the uniform cult of the Church of England, its system of religious belief, worship, and the rites and ceremonies written down in the Common Prayer Book of 1559, which was established by Queen Elizabeth I. Understandably, these laws have always been considered a great blessing.

In 1648, based on biblical genealogy, the famous Archbishop of Armagh, James Ussher, pronounced that the creation of the Earth had occurred in 4004 B.C. Of course, Charles II accepted the preaching of his stout, royalist archbishop. Until the beginning of the nineteenth century, this idea was also accepted by nearly everyone, especially in English-speaking countries. But then it became obvious that the Earth was not created in 4004 B.C. because it became known that several ancient cultures already existed at that time. A new religious idea developed: the "infancy catastrophism theory." Did it not seem convenient to visualize Noah's sin flood of 40 days as a most recent event in a series of relatively short catastrophes that had overwhelmed the globe? The "catastrophism" preachers made many prophecies of coming catastrophes and enjoyed, as today, their profitable living.

Philosophical underpinnings were needed to curb these wild fantasies, and in 1830 Lyell was successful in establishing Hutton's geologic concept of 1788 formulated as "The present is the key for the past." He traced this concept back to King Charles' II Four Laws of Uniformitarianism. James Hutton was the first active geologic researcher and is considered the "Father of modern geology." Of course, at that time neither Hutton nor Lyell had any idea that the earth had been in existence for some 4,500 million years. Both assumed an unchangeable permanence of creation. They assumed that the Earth could never have changed. But the discovery of a plush *Glossopteris* flora of Upper Permian time in the central Transantarctic Mountains by the Taylors (1993) shows that the present is not always the key to the past.

It is understandable that very conservative geologists of English-speaking countries rely on Lyell's somewhat rigid framework. But the Earth expansion theory is not a religious doctrine opposed to the authorized dogma. It is not atheistic or hostile to religious interests. Yet, the uniformitarian dogma is stalling the advancement of geologic science. Discussions are invited to study the pros or cons of the many published indications which seem to prove the Earth expansion concept.

Time: 10:00 a.m., Tuesday, October 26

Eustatic Sea-Level History as Exhibited by Palynomorphs in the Anambra Basin

F. A. Lucas

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Palynormophs recovered from Ajire-1 well, Anambra Basin, are grouped, evaluated, and appraised for their significance in the reconstruction of ancient climates and global sea-level history during Paleocene-Eocene geologic times. The Palynomorphs are: dinocysts, acritarchs, pollen, and spores. Ancillary microfossils, including foram tests, Pediastrum, *Concentricystes circulus*, and fungal spores, also support the conclusions. During the Paleocene, a major sea-level high stand (transgression) resulted as a consequence of glacial retreat caused by climatic warming of the earth. In contrast to the Paleocene, during the early Eocene (Ypresian) short term marine transgressions occurred within a long term major regression that resulted from glacial fluctuations caused by climatic cooling. The Paleocene/Eocene eustatic sea-level events recorded in the Anambra Basin compare favourably with those of the Gulf Coast, Europe, and the Haq *et al.* (1987) global curve. The short-period early Eocene transgressions early Eocene are diagnostic of global eustatic sea-level rises and occur at depths of 3,119 ft (963m) 1,877 ft (563m) abd 1,302 ft (394m) in the Ajire-1 well.

Time: 3:00 p.m., Monday, October 25

Organic Facies and Palynofacies in a Sequence Stratigraphic Context: a Review

Richard Tyson

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The palynological recognition of marine systems tracts is based on several major trends in terrestrial and marine components. There are three key trends in terrestrial components: (1) Their relative contribution is positively correlated with the siliciclastic sediment accumulation rate (e.g. relative distal decrease in absolute abundance, phytoclasts of kerogen, sporomorphs of palynomorphs, % reworked and % freshwater palynomorphs). (2) Their nature is progressively modified by hydrodynamic equivalence effects with increasing distance and duration of transport away from source (e.g. relative increase in pollen *vs.* spores, small black phytoclasts *vs.* large brown phytoclasts). (3) Their preservation state declines with increasing distance and duration of transport away from their source (relative increase in degraded, oxidised, and refractory phytoclasts). Stratigraphic variations in these variables permit the recognition of relative proximal-distal variations in palynofacies characteristics which can then be used to help infer systems tract boundaries. However, they are also strongly influenced by climate and relative palaeogeographic position.

The most significant parameters based on marine components appear to be phytoplankton diversity trends and the dinocyst-to-prasinophyte ratio. Dinocyst diversity patterns have to be interpreted with care as they can be modified by preservation and by nutrient levels; relative eutrophication can result in high-density, low-diversity "bloom" assemblages even under open shelf conditions. Furthermore, cyst-forming dinoflagellates are meroplankton rather than holoplankton, and may not therefore show their highest diversities under the most pelagic (TST-HST) conditions. There is, however, a remarkable correlation between stage-by-stage dinocyst generic diversity and the mean value of the Exxon sea-level curve ($r = 0.93$). The association of low dinocyst-to-prasinophyte ratios with distal characteristics in the terrestrial components argues against the prevalent "brackish" interpretation of these organisms. Their increased abundance probably reflects a combination of low sediment dilution and low dinocyst production under dysoxic-anoxic basinal conditions. The reason for their association with dysoxia-anoxia remains uncertain.

Variations in source rock characteristics between marine systems tracts appear to be largely the result of associated and perhaps partly auto-correlated variations in palaeoxygenation. Oil-prone and organic-rich source rocks are only deposited in the condensed section (or TST to early HST) if and where this coincides with dysoxic-anoxic conditions (that result in maximum preservation as well as minimal dilution of organic matter). High amplitude Milankovitch-scale redox cyclicity often results in the minimum *and* the maximum source rock potential occurring within the condensed section. This is because oxygen-related differences in preservation become extreme at low sediment accumulation rates.

Time: 10:30 a.m., Monday, October 25

"CHITINOS": A Personal Image and Data-Acquisition System for the Micropaleontologist

Geert Van Grootel*, Jocelyn Hamel, and Aicha Achab

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Computer technology is moving slowly onto the desktop of the micropalentologist. Several systems are now available that can manage the large quantities of textual and image data found in micropaleontological catalogues. However, none of the systems now available can be used on-line to store data acquired by microscopic observations.

Just such an integrated image and data acquisition system (IBM-PC) is currently under development at the Quebec Geoscience Centre. The greatest usefulness of the system is to allow storage and retrieval of all relevant data needed for specific determinations. The initial prototype will focus on chitinozoa—hence the workname "CHITINOS"— but the final product will be able to work with whatever microfossil group.

The system has a client-server architecture, and the client interface can work against most SQL-database engines. The interface runs under MS-Windows or IBM OS/2 and is developed with Gupta's SQL-Windows.

The core of the image acquisition system is a real-time image processing board. The system provides an image processing capability in addition to image storage and retrieval. This permits the acquisition of biometrical data directly on the captured video image, and subsequent storage directly into the database. The resolution of the digital images depends on the type of video input, resolution of the camera, scanlines of the SEM, etc., and the type of board used. Depending on the board used, images with a user-definable resolution up to 4K can be stored and processed. Direct output is available by use of a video printer, but the images can also be printed via digital imaging software.

The system will provide the micropaleontologist with the possibility of producing rapid intermediate reports, including species lists and graphical output in the form of rangecharts, frequency tables, and biometrical plots.

The system will be able to work in conjunction with electronic taxonomic catalogues—e.g., PALCAT.

The system is aimed at the micropaleontologist who will use it as a data entry, retrieval, and image processing system for systematic determination. Subsets of data from this determination database can then be transferred to taxonomic catalogue systems like PALCAT, and all acquired biometrical data can be used with statistical software packages.

The long-term aims are the development of automated feature extraction systems; hence the use of an image processing board. This will, at least partly, automate biometrics and consequently the development of an AI system that will be able to extract relevant data from images and that will form the base for an expert system.

*Speaker

Time: 10:40 a.m., Tuesday, October 26

Possible Evidence for Life Cycle Stages in Lower Silurian Organic-Walled Microphytoplankton, Kentucky, U.S.A.

Gordon D. Wood

Amoco Production Company, P.O. Box 3092, Houston, TX 77253.

Internal structures of the acritarch *Hoegklintia digitata* are illustrated from the Lower Silurian (Llandovery) Osgood Formation and Estill Shale of Kentucky. *Hoegklintia* is a member of the artificial group Synaplomorphitae which includes several large acritarch genera (e.g., *Estiastra, Goniosphaeridium, Pulvinosphaeridium*). A dark substance (termed Shalensubstanz by Eisenack in 1959) has been reported within the processes and process tips of several species of this artificial group, including *Estiastra magna, Hoegklintia corallium*, and *Hoegklintia digitata*. Several examples illustrated here indicate these dark substances may be deteriorated internal structures.

Three different categories of internal remains have been observed. Firstly, a cluster of circular-to-oblong "cells" within a vesicle. Secondly, an internal body that morphologically mimics the contour of the autophragm. Lastly, circular-to-oblong "cell" clusters connected by "tubes" to an internal body.

Interpretation of these entities are hindered because of the unknown affinity of this fossil group. If *Hoegklintia* is a cyst, the internal mimic represents the vegetative cell. Antithetically, *Hoegklintia* would represent a resistant-walled vegetative cell and the internal body a cyst. Or, both hypotheses are incorrect and the internal "body" represents the remains of contracted cystoplasm. The circular-to-oblong "cell" clusters connected by a "tube" to an internal body display a morphologically similar habit to the siphoning peduncle of ectoparasitic dinoflagellates (e.g., members of *Syltodinium* or *Paulsenella*).

Poster Display

Biostratigraphic, Paleoecologic, and Paleobiogeographic Significance of Uppermost Permian-Lower Triassic Fungal and Fungal-Like Remains

Gordon D. Wood[1] and Gunn Mangerud[2]

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Documentation of fossil mycoflora diversity and abundance are scarce because of the paucity of germane literature. Palynological literature is particularly scarce. An exception to this is the apparent qualitative and quantitative increase in fungal or fungal-like forms near the Permian-Lower Triassic boundary. Initially recognized in the southern Alps, this "event" has been recorded from eastern Greenland, Canada, Norway (Spitsbergen and offshore), China, Australia, Israel, and Tunisia.

Traditionally, the only fungal remains reported from the uppermost Permian-lowest Triassic were cited as *Tympanicysta stoschiana* or *Chordecystia chalasta*. Recent studies of material from the Barents Sea area indicate a diversity of fungal and fungal-like types including ?*Reduviasporonites* sp., hyphae (some exhibiting possible clamp connections) and forms displaying morphological characters similar to the extant genera *Polyadosporites, Asyregraamspora*, and *Ctenasporites*.

The presence of this widespread "fungal event" may be related to eustatic and concomitant geochemical changes across Permian-Triassic boundary. The latest Permian-earliest Triassic is marked by an apparent global regression which exposed paralic and shallow shelves to oxidation and erosion. This is manifest by a reduction in $\delta^{13}C$ (a reflecting of the net rate of organic carbon oxidation) and also a decrease in $\delta^{18}C$. The oxidation of a large store of organic carbon at the end of the Permian would raise CO_2 and reduce O_2 content in both the atmosphere/ocean system and probably result in a rise of ambient surface temperatures. The apparent increase of fungal remains may be a reflection of these climatic and geochemical changes. The decrease in photosynthetic fixation of reduced carbon (buried organic carbon) during an arid Early Triassic combined with low δO^{18} values (consumption in organic decay) may reflect increased fungal intervention (interception by lignolytic basidiomycetes). The probable dominance of gynmosperms with large ratios of live/dead organic carbon (acid humus derived from foliar litter) in combination with areas exposed by a global regression would offer a coincidence of environmental conditions for fungal proliferation. The presence of this "fungal spike" in geographically separated areas at approximately the Permian-Triassic boundary lends support to this interval as a "crisis event."

Poster Display

Content and authors of the A.A.S.P. 25th anniversary publication edited by J. Jansonius and C. Mc Gregor: "Palynology: principles and applications"

Palynology: principles and applications

Edited by: Jan Jansonius & Colin McGregor

An update on the progress of the "25th anniversary" publication.

Work is proceeding along on completion of this ambitious undertaking by the AASP. The following list of chapters

VOLUME 1: PRINCIPLES

1	Introduction	Jansonius & McGregor
2	Nomenclature and taxonomy: systematics	*Traverse
3	Techniques	Wood, Gabriel & Lawson
4	Archean and Proterozoic paleontology	Knoll
5	Acritarchs	*Strother
6	Dinoflagellates	Fensome, Riding & Taylor
7	Green and bluegreen algae	*Colbath
7A	Spores of Zygnemataceae	van Geel & Grenfell
7B	Prasinophytes	Guy-Ohlson
7C	Colonial chlorophytes	*Batten
7D	Botryococcus	*Batten & *Grenfell
7E	Gloeocapsomorpha	*Wicander, *Foster & *Reed
8	Spores	Playford & Dettmann
9	Pollen	Jarzen & Nichols
10	Fungi	Elsik
11	Chitinozoans	Miller
12	Scolecodonts	Szaniawski
13	Miscellaneous (introduction)	Jansonius
13A	Linotolipids and cenospheres	Miller & Jansonius
13B	Clitellate cocoons	Manum
13C	Melanosclerites	Cashman
13D	Microforaminiferal linings	Stancliffe
13E	Zoological cuticles	Miller
13F	Older plant macerals	D. Edwards & Wellman
14	Plant evolution	*T. Taylor
14A	In situ spores in early land plants	D. Edwards & Richardson
14B	Angiosperm pollen in situ	Friis & Pedersen
14C	In situ pollen and spores	Taylor, Osborn & E.Taylor
14D	Exine origin, development and structure	Rowley

VOLUME 2: APPLICATIONS

15	Introduction: time scales	Christopher & *Goodman
16	Paleozoic phytoplankton	Molyneux, Le Hérissé & Wicander
17	Chitinozoans	Paris
18	Paleozoic spores and pollen	Higgs
18A	Early and middle Paleozoic	Richardson
18B	Middle and Upper Devonian miospores	Streel & Loboziak
18C	Lower Carboniferous	Clayton
18D	Upper Carboniferous	Owens
18E	Permian	Warrington
18F	Paleozoic megaspores	Scott & Hemsley
19	Mesozoic-Cenozoic phytoplankton	Stover, Williams et al.
20	Mesozoic-Tertiary spores and pollen	Batten
20A	Triassic	Warrington
20B	Rhaetian-Cretaceous	Batten & Koppelhus
20C	Late Cretaceous-Tertiary	Frederiksen
21	Aquatic Quaternary	Mudie & Harland
22	Non-aquatic Quaternary	*MacDonald
23	New frontiers in palynology	Bryant
23A	Archeology	Bryant & Holloway
23B	Underwater sites	Weinstein
23C	Prehistoric diet	Sobolik
23D	Melissopalynology	Jones & Bryant
23E	Entomopalynology	M. Pendleton, Bryant & B. Pendleton
23F	Medicine	O'Rourke
23G	Forensic studies	Bryant, Jones & Mildenhall
24	Data organization and computers	Lentin
24A	Biostratigraphic information programs	Lentin
24B	Palynodata	Piel
24C	Computers in archeology and Quaternary palynology	Davis
24D	Interactive paleontolcgical systems	Munsey
24E	Computerized identification keys	Lentin
25	Quantitative palynology	L. Edwards & *Guex
26	Palynofacies	Batten, Lewis & Mann
27	Fecal pellets	*Robbins
27A	Dinoflagellate-eating zooplankton	*Mudie
27B	Diatom-eating zooplankton	*Haberyan
27C	Pellets as transporters of pollen	*Mudie & Head
27D	Pellets and epifluorescence	*Cuomo & Chen
28	Palynomorphs in ores, hydrocarbons	**Robbins
28A	Ore bodies	*Robbins & Burden
28B	Spores in oil; overview	*Jansonius & McGregor
28C	Pollen in crude from igneous reservoir	*Jiang Dexin
29	Vegetational history	*Frederiksen
29A	Devonian spores	Marshall
29B	Carboniferous coal beds	*Eble
29C	Cretaceous of eastern Europe, Siberia and Asia	*Herngreen, Rovnina & Smirnova
29D	Western interior USA during Cretaceous-Tertiary transition	*Nichols
30	History of the marine realm	*Head
31	Ecology of modern dinocysts	*Dale
32	New applications for dinocyst palynology	*Dale

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Agenda of palynological conferences, symposia, workshops 1994-1996:

1994 July 11-18, Bujumbura, Burundi, **II Symposium of African Palynology** (see newsletter 44)

1994 August 28-31, Guiyang, Guizhou, China, **I International Symposium Permian Stratigraphy, Environments and Resources** (Details: Dr. Wang Xiang-dong, Secretariat of the Organizing Committee for ISP-1994, Laboratory Palaeobiology and Stratigraphy, Nanjing Inst. of Geology & Palaeontology, Academia Sinica, Chi-Ming-Ssu, Nanjing, 210008, China, fax. 86-25-712207).

1994 Sept. 6-10, Sheffield, U.K., C.I.M.P. Symposium on **Stratotypes and Stages, Palynology, Palaeoenvironments and Stratigraphy**. Second Circular in this newsletter.

1994 Sept. 19-23, Kerkrade, Heerlen, The Netherlands, **IV Palaeobotanical-Palynological Conference**, with field trips a.o. Devonian-Carboniferous of Belgium and Germany. Details: G.F.W. Herngreen, Geological Survey of the Netherlands, P.O.Box 157, 2000 AD Haarlem, The Netherlands; Fax.: 31- 23- 401754.

1994 Nov. 2-4, College Station, Texas, U.S.A., **27th Annual Meeting of the American Association of Stratigraphic Palynologists**. (Details: Dr. Vaughn M. Bryant, Jr., Departm. Anthropology, Texas A. & M. University, College Station, Texas, 77843 U.S.A, Fax. 1-409-845 4070).

1994 Dec. 3-10, St-Petersburg, Russia, **I International Symposium on Biostratigraphy of Oil and Gas Basins**. Deadline for abstracts Dec. 31 1993. Details and first circular: Dr. Olga. A. Sochevanova, VNIGRI, Liteiny 39, St-Petersburg 191104, Russia (see also first circular in CIMP Newsletter N° 45).

1995 Aug. 28- Sept. 2, Krakow, Poland, **XIII International Congress on the Carboniferous-Permian**, Details: Sonia Dybova-Jachowicz, Panstwowy Instytut Geologiczny, Oddzial Górnoslaski, 1 Królowej Jadwigi, 41-200 Sosnowiez, Poland. Phone: 48 32 66 20 36; Fax.: 48 32 66 55 22.

1995 Oct. 10-14, Ottawa, Ontario, Canada, **28th Annual Meeting of the American Association of Stratigraphic Palynologists**. Symposia, Technical Sessions, Posters, Field Trip. Details: Ms. Susan A. Jarzen, Canadian Museum of Nature, P.O. Box 3443, Station "D", Ottawa, Canada K1P 6P4, Fax: 1-613-954 4724.

1996 June 22-29, Houston, Texas, **9th International Palynological Congress** of the I.F.P.S., Symposia, Technical Sessions, Posters, Field trips. Details: Vaughn M. Bryant, Jr., Dep. Anthropology, Texas A. & M. University, College Station, Texas 77843-4352, Phone: 1-409- 845 5242; Fax.: 1- 409- 845 4070. or John H. Wrenn, Center for Excellence in Palynology, Dep. Geology & Geophysics, Louisiana State University, Baton Rouge, LA 70803, U.S.A. Phone: 1- 504- 388 4683; Fax.: 1- 504- 388 2302.

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C.I.M.P. WORKING GROUPS AND SUBCOMMISSIONS

Vallatisporites Working Group
Contact person: Bernard Owens, British Geological Survey, Keyworth, Nottinghamshire, NG12 5GG, U.K.

"_Lycospora_" First Occurrence Working Group
Contact person: Elzbieta Turneau, Instytut Nauk Geologicznych, Polska Akademia Nauk, Ul. Senacka 1/3, 31-002 Krakow, Poland.

Upper Devonian "_Grandispora_" Working Group
Contact person: Ken Higgs, Department of Geology, University College Cork, Cork, Ireland.

Reworked Palynomorphs Working Group
Contact person: Philippe Steemans, Lab. ass. de Paléontologie, Université de Liège, 7 Place du Vingt-Aôut, B-4000 Liège, Belgium

Acritarch Subcommission
Contact person: Stuart Molyneux, British Geological Survey, Keyworth, Nottinghamshire, NG12 5GG, U.K.

Chitinozoa Subcommission
Contact person: Ken Dorning, Pallab Research, 58 Robertson Road, Sheffield S6 5DX, U.K.

The Executive Committee of the C.I.M.P.

C.I.M.P. Constitution:

1. The Commission shall be named the '**Commission Internationale de Microflore du Paléozoïque**' (C.I.M.P.).

2. The Commission Internationale de Microflore du Paléozoique (C.I.M.P.) shall act as an international federation of palynologists interested in Palaeozoic palynology. The aims of C.I.M.P. shall be to advance knowledge in palynology and related subjects by the promotion of international co-operation and meetings between scientist of all regions and countries.

3. Meetings of C.I.M.P. may be organised independently or in conjunction with other international meetings such as those sponsored by the International Union of Biological Sciences and/or the International Union of Geological Sciences, or its related Commissions.

4. The General Assembly of C.I.M.P. shall consists of those members present at a general meeting of palynologists for which notice of 3 months has been given by the C.I.M.P. officers.

5. Members of C.I.M.P. shall be all palynologists who desire to belong to C.I.M.P.

6. Business of C.I.M.P. shall be conducted by the Executive Committee of the Commission, and by committees appointed by the Council.

7. The executive Committee of C.I.M.P. shall consist of the following members: a President, the Past-President, a Secretary/Treasurer, and members for each of the specialist working groups.

8. Elections. The new President and Secretary shall be elected by postal ballot to the membership. The President may not stand for a second consecutive period of office in the same capacity. Other officers may not stand for more than two consecutive periods of office.

9. Any motions passed by a General Assembly shall be referred to the Executive Committee and shall be considered by the Executive Committee.

10. The existing Executive Committee shall retire at the conclusion of a General Assembly at which the names of a newly elected Executive Committee have been announced.

11. The Constitution shall only be amended at a General Assembly or at an extraordinary General Assembly called by the Executive Committee. In either case any proposed amendment shall be circulated six months before the meeting to all members in good standing.

12. Audit. The accounts of C.I.M.P. shall be made up annually on 31 December and submitted to an auditor approved by Executive Committee. Abstracts of accounts shall be presented at each General Assembly.

13. Dissolution. The Commission (C.I.M.P.) shall be dissolved only at a General Assembly or extraordinary General Assembly, which has been called for this purpose, by a majority vote of the members present. In the event of such dissolution, any property or assets of the Commission shall by decision of that General Assembly be disposed of by gift to one or more international organisations concerned with the furtherance of palynology.