COMMISSION INTERNATIONALE
DE MICROFLORE DU PALEOZOIQUE

NEWSLETTER 23

March 1980

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I. EDITORIAL

This Newsletter has been delayed until March in order to give all C.I.M.P. members a more detailed idea of the scope of C.I.M.P. activities at the 5th International Palynological Conference in Cambridge. There is still time to register but you are urged to do so quickly.

The style of our Newsletters has now remained stable for three years. Although it is easy to keep you informed of current palynological activities in the Newsletter, it could be more extensively used for your own contributions. We are always

prepared to include short contributions from our members. It is up to you, the member, to make its contents more varied. Why not make a contribition.

As promised last year, our membership dues for 1980 are not increased despite increases in costs of postage, paper and production costs. Our dues have not been increased since 1974. Hopefully this situation can continue for sometime if members remember to pay their contributions promptly.

II. FUTURE MEETINGS

a. 5th International Palynological Conference, Cambridge, England
June 29th - July 6th 1980.

General The Organising Committee hope that the third and final circular will be sent to all those who have registered by the end of March. Already almost 500 palynologists have registered and a very full scientific programme has been proposed. All of the topics listed in previous circulars are included in the programme and some will occupy up to 4 half-day sessions. The wide diversity of topics and the large number of papers offered for presentation will necessitate at least four concurrent sessions being held.

IT IS NOT TOO LATE TO REGISTER BUT IF YOU INTEND TO BE PRESENT YOU ARE STRONGLY ADVISED TO BOOK TODAY BY WRITING TODAY TO MRS G. DREWRY, DEPARTMENT OF GEOLOGY, SEDGWICK MUSEUM, DOWNING STREET, CAMBRIDGE, CB2 3EQ, ENGLAND.

THIS IS PARTICULARLY IMPORTANT IF YOU WILL REQUIRE ACCOMMODATION TO BE RESERVED FOR YOU.

REGISTRATION FEE £30.

In order to give you an idea as to how the Conference will be organised we enclose below some details for the programme of sessions. We emphasise that this is only a final outline of the programme. It may be necessary to make some minor alterations. We have included only those sessions which relate directly to C.I.M.P. members. There will be extensive coverage of all other aspects of palynology particularly those including the Quaternary and Applied Palynology.

Proposed Programme

		1	2	3
Monday	am	Opening Session		
	pm	Dinoflagellates (25)	Palynology Boundaries (16)	
	evening	Reception		
Tuesday	am	Dinoflagellates (25)	Stratigraphic Palynology (11)	
	pm		Stratigraphic Palynology (11)	
	evening	C.I.M.P. General Assembly		
Wednesday	am	Chitinozoa (23)	Palynological Boundaries (16)	
	pm	Chitinozoa & Scolecodonts (23)	Palynological Boundaries (16)	
	evening	Invited Lecture		
Thursday	am	Acritarchs (20)	Stratigraphic Palynology (11)	
	pm	Facies controls (14)	Angiosperm Origins (17)	
	evening	Conference Dinner		
Friday	am	Pre Cambrian (24)	Normapolles (21)	Kerogen (12)
	pm		Palaeogene Taxonomy (22)	Kerogen (12)
	evening	I.C.P. General Assembly		
Saturday	am		Palynological Boundaries (16)	Kerogen (12)
	pm	Closing Session		

Numbers in brackets refer to the number of topics listed in the second circular.

At the present time the final arrangements for the programme are being compiled. It is not possible to list all the papers which will be presented in the various sessions. We can however include a list of only some of the papers which have been submitted which will probably be included in sessions which C.I.M.P. is convening. This list is by no means complete and is only a guide to help you if you still have to decide if you will come.

Grahn, Y. & Afzelius, B.A.; On the affinity of Chitinozoa.

Reid, P.C. & John, A.W.G., Possible relationship between Chitinozoa and Tintinids.

Paris, F; Chitinozoa: some aspects of their phylogeny and taxonomy.

Bockelie, T.; The internal structures of species of Lagenochitina and Conochitina (Chitinozoa).

Achab, A. & Millepied, P.; Conochitina symmetrica Tangourdeau et de Jekhowsky, a guide fossil to the Lower Ordovician.

Gao Liand ; Lower Ordovician chitinozoans from Wuding and Luquan, Yunnan.

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Gao Liand ; Lower Ordovician chitinozoans from Wuding and Luquan, Yunnan.

Viswanathiah, M.N. & Ventatachalapathy, V; Scolecodonts and Chitinozoa from the Indian Peninsula.

Bergman, C; Lower Wenlock polychaete fauna from Gotland, Sweden.

Verniers, J.; The Silurian of the Mehaigne Valley (Brabant Massif, Belgium): stratigraphy and chitinozoa.

Dorning, K.J.; Silurian chitinozoa and scolecodonts from the type Wenlockian & Ludlovian of Salop, England.

Hutter, T.; Chitinozoans from the Devonian of a shallow gas well in north eastern Ohio, I.S.A.

Van Erve, A.; Lower Jurassic scolecodonts from the Vicentinian Alps (North eastern Italy).

Boyer, P.S.; Calcite in the mandibles of a marine polychaete.

Riegel, W.; Palynological solutions to correlation problems in the Devonian of Germany.

Candilier, A.M.; Coquel, R. & Loboziak, S.; Uppermost Devonian and Lower Carboniferous megaspores from the Illizi Basin (Algeria) and the Rhadames Basin (Libya).

Marques-Toigo, M., Guerra-Sommer, M. & Cazzulo-Klepzig, M.; Mega and microflora assemblages of the Itarare Group, Neopalaeozoic of the Panama Basin, southern Brazil.

Latcheva, J.; Palynological evidence on the age of a terrigeneous section in the western Sredna Gora (Bulgaria).

Dutta, S.K.; Study of the Lower Gondwanas of Siang District, Arunachar Pradesh, India.

Lu Lichang; Devonian miospores from the Longhausen section in Zhanyi of Yunnan and their stratigraphic significance.

Higgs, K. & Streel, M.; Uppermost Devonian to Middle Tournaisian spore zonations in Ireland, Belgium and Germany.

Lu Lichang; Upper Devonian (Frasnian) spores from Sichuan and Yunnan, China.

Liao Keguang; Palaeozoic sporo-pollen assemblage from Songe-Kiware Coalfield, Tanzania.

Qu Lifan, Yang Jiduan, Bai Yunhong & Zhang Zhenlai; A preliminary discussion on the characteristics and stratigraphic divisions of Triassic spores and pollen in China.

Ouyang Shu & Li Zai-ping; Lower Triassic microflora from the Ka'itou Formation of Fuyuan district, N.E. Yunnan.

Zhang Lu-jin; Keuper spores and pollen in central Sichuan.

Bai Yunhong; Early Middle Triassic microflora of Guizhou Province, China.

Lui Zhao-Shung, Shang Yu-ke & Li Wen-ben; Mesozoic sporo-pollen assemblages from Shaanxi and Gansu, North Western China.

Walton, H.S.; Cryptarcha and acritarcha from late Proterozoic and Cambrian strata of the Colville Lake area, District of MacKenzie, N.W.T., Canada.

Booth, G.A., Molyneux, S.G. and Rasul, S.M.; Palynomorphs and the Cambrian/Ordovician boundary.

Richardson, J.B., Rasul, S.M. and Al-Ameri, T.; Acritarchs, miospores and correlation of the upper Silurian and lower Devonian stages.

McGregor, D.C.; Spores and the middle/upper Devonian boundary.

Coen, M., Loboziak, S. and Streel, M.; Conodonts and miospores from Frasnian sediments in the Boulonnais, France.

Hou Jung peng; Miospore assemblages of the Devono-Carboniferous transitional beds in Xikuangshan, Central Hunan, China.

Van Veen, P.M. and Van der Zwan, C.J.; Aspects of late Devonian and early Carboniferous palynology of southern Ireland: the change in composition of palynological assemblages along the Devonian-Carboniferous boundary.

Clayton, G.; Palynological correlation of the chronostratigraphic boundaries of, and within, the Dinantian of western Europe.

Keegan, J.B.; Palynological correlation in central Ireland.

Gorecka, Teresa and Slusarczyk, S.; Namurian-Westphalian boundary in the north-western part of the intra-Sudetic trough.

Kosanke, R.; Palynology of the Mississippian-Pennsylvanian boundary in the United States.

Truswell, Elizabeth, M.; The Permo-Carboniferous boundary - A Gondwanaland viewpoint.

Foster, C.B.; Spore-pollen floras through the late Permian and early Trassic of the Bowen Basin, Queensland (Australia): their relationship to the Permian/Triassic boundary.

Balme, B.E.; Palynology of Late Permian-Early Triassic strata in Greenland and Alaska, and its plant geographic implications.

Visscher, H.; Ranges of selected palynomorphs in the Alpine Triassic of Europe.

Morbey, S.J.; Palynostratigraphic developments at the lower/middle Jurassic (Toarcian/Aalenian) boundary in western Europe: problems of dinoflagellate provincialism.

Cernjavska, Svetlana; Early Jurassic palynology in Bulgaria.

Van Erve, A.W. and Schuurman, W.M.L.; Palynological characterization of the Triassic-Jurassic.

Fisher, M and Dunay, R.; Palynology and the Triassic/Jurassic boundary.

Martin, F.; Middle and Upper Cambrian and lower Ordovician acritarchs from Eastern Newfoundland.

Smith, D.G.; Progress in Irish Lower Palaeozoic stratigraphical palynology.

Dorning, K.; Wenlock-Ludlow acritarch assemblages from Shropshire, England.

c. Palynology at the North Atlantic Margins Dublin, Eire, 13-15 September 1982

Joint meeting of Commission Internationale de Microflore du Paleozoique and American Association of Stratigraphical Palynologists.

INTRODUCTION. The second joint meeting of the CIMP and AASP is to be held in Dublin from 13 - 15 September 1982, hosted jointly by Trinity College Dublin and the Geological Survey of Ireland. All palynologists are warmly invited to attend.

THEME. Papers and demonstrations on the theme "The Palynology of the North Atlantic Margins" will be given preference for inclusion in the programme, but contributions on other topics will also be welcomed. Several working groups will hold meetings during the conference, and some of these will present progress reports. It is anticipated that papers dealing with palynomorphs of all ages from Precambrian to Quaternary will be included in the programme.

VENUE. All sessions will be held in Trinity College Dublin.

PROGRAMME. Registration will begin on Sunday 12 September. Lectures, demonstrations and working group meetings will take place on 13-15 inclusive. Two field excursions will be held immediately after the meeting, one Lower Palaeozoic and the other Upper Palaeozoic. These will each be for either one or three days, depending on preference of participants.

CONFERENCE LANGUAGE. The conference languages will be England and French.

PUBLICATION. Abstracts of papers presented will be printed and distributed before the meeting. Papers read at the meeting will be considered for publication in Palynology subject to normal AASP publication procedures.

REGISTRATION FEE. It is estimated that the registration fee will not exceed £20 for professional members. A substantially reduced rate is planned for students.

ACCOMMODATION. Limited accommodation will be available in Trinity College. Accommodation will also be available in numerous hotels of varying standards close to the College.

FIRST CIRCULAR. The first circular will be circulated in mid-1980.

ENQUIRIES. Enquiries and requests for further information should be addressed to either of the local secretaries:

Geoff Clayton
Department of Geology
Trinity College
Dublin 2

Ken Higgs
Geological Survey of Ireland
14 Hume Street
Dublin 2

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d. International Symposium on the Ordovician System, Oslo, Norway, 20-23 August 1982

As part of this symposium Dr Tove Bockelie has suggested she would like to organise a meeting concerned with Chitinozoa. This will be an offiicial meeting of the CIMP Subcommission on Chitinozoa and Dr Bockelie would be glad to hear from any members with suggestions of papers and activities.

Please contact her direct at Paleontologisk Museum, Sarsgt 1, Oslo 5, Norway.

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e. The Micropalaeontology of Shelf Seas - Fossil and Recent
University of Hull, England 19-25 July 1980

The meeting, which follows the IGC in Paris, is planned as follows:

July 19-20. Field excursion to the classic Carboniferous localities of Northern England, led by Dr A C Higgins and Dr W J Varker.

July 21,22. Registration. Sessions for the reading of papers. Demonstrations. Evening events.

July 23. Local excursions to the Jurassic of Lincolnshire; Jurassic of Yorkshire (leaders: Drs R H Bate and A R Lord); Cretaceous of Yorkshire (led by Prof J W Neale).

July 24,25. Sessions for the reading of papers. Demonstrations. Collecting of living material from the Humber Estuary. Symposium Dinner.

It is proposed to publish the proceedings. Those interested in attending/ presenting papers should write for further information to Dr M D Brasier, Dept of Geology, The University, Hull, HU6 7RX, England.

Papers offered so far:

H. Bailey (Palaeoservices, London): Late Cretaceous foraminifera of N.S. Europe - Stratigraphy and palaeogeography.

C.R. Barnes (Ontario, Canada): Ordovician conodonts of epeiric seas, North America.

C. Benjamini (East Anglia): Biostratigraphy, microfacies and palaeoecology of Israeli Eocene chalks and nummulitic limestones.

P. Boyd (London): Microfaunal assemblages from estuarine deposits on archaeological sites in the city of London.

M.D. Brasier (Hull): Microplankton and the Cambrian evolutionary explosion.

C. Burrett (Tasmania): Micropalaeontology of the Ordovician shelf of Australia.

R.E. Casey (Houston): Several papers on radiolarians, planktonic foraminiferans and pteropods living in the water column.

R.E. Casey: Living benthonic foraminiferans of the continental shelf off Texas.

M.B. Hart (Plymouth): Foraminiferal biohorizons.

M.B. Hart & C. Harris: Albian Ostracoda and Foraminiferida of the North Sea area.

A.A. Kureshy (New York): Recent Foraminifera of the English Channel.

J.W. Murray & S. Sturrock (Exeter): Comparison of low energy and high energy marine middle shelf foraminiferal faunas, Celtic Sea and west English Channel.

S.W. Petters (Ibadan): Foraminifera of the Nigerian Cretaceous and Lower Tertiary epeiric seas.

Mdme M. Rossett (Montrouge, France): Les Foraminiferes recents de la Manche.

Viera Scheibnerova (Sydney, Australia): Permian foraminiferal communities on a cold-water clastic shelf of eastern Australia.

M.G.A. Setty (Goa, India): Recent foraminiferal diversity in a clastic shelf area, north of Bombay, India.

L. Sheppard (London): A preliminary correlatinn of the Bathonian sediments north and south of the English Channel.

Mr. Swiecicki (Plymouth): Foraminiferida of the Campanian/Maastrichtian.

J.H. Wall (Calgary, Canada): Mesozoic microfaunal studies in the Canadian Arctic Archipelago.

A.C. Wallis (Hull): Ecology of living benthic foraminifera off the coast of Scotland.

Mr Weaver (Plymouth): Ostracoda of the mid-Cretaceous.

III. NEWS FROM RECENT MEETINGS

a. Comite des Travaux Historiques et Scientifiques, Bordeaux, April 1979.

In France, each year, the "Ministere des Universities" organise a meeting in various towns of the country. Last year it was in Nancy, this year in Bordeaux and next year it will be in Caen. Various forms of science are presented and the Paleobotanical Section is particularly important. Both French palaeobotanists and sometimes foreigners can find the opportunity to compare their conceptions. All the papers presented at these meetings are published in book form only about six months after each Congress. At the Nancy meetings in 1978 17 palaeobotanical papers were presented and published in the C.R. 103e Congr. Nat. Soc. Sav., section Sciences, fasc. II, Paleobotanique. This book of 228 pages and 44 plates was published in 1978 and is sold by the Bibliotheque Nationale, 58 Rue de Richelieu, 75084 Cedex 02, Paris 906492. The same supplier will soon publish the papers presented at this year's meeting in Bordeaux:

C. Azema: The Classopollis pollen of the Brouillard stone pit.

J. Broutin: New ideas about the Valdeinfierno Lower Carboniferous.

D. Desplats: A new species of Dadoxylon (Araucarioxylon) from the Wissant Albian (Boulonnais).

J. Duperon: Leguminosae fossil wood from the Stampian of Agenais.

M. Duperon-Laudoueneix: A Tertiary Cupressus wood from Charente.

T. Fernandez-Marron: On the Oligocene macroflora of Spain - similarities with the French one.

C. Fessler-Vrolant & M.G. Starostin: Paleoxylologic study of Sahard: a new fossil wood of Guttiferae from In-Salah.

D. Goujet & M. Locquin: Fungic spores in fish scales and Paleozoic Agnathes.

J.C. Koeniguer: The silification of a coniferal wood from the "Continental intercalaire" of Mauritania.

A. Lejal-Nicol: On the fossil flora from the Unar Formation in the Djebel Ben Ghnema (Libya).

A. Lejal-Nicol & M.E. de Oliveira: On a new species of Cyclodendron Kraüsel 1928, from the lower Permian of Santa Catarina, Brazil.

M. Locquin & J.C. Koeniguer: A fossil polypora with porae spores in the Oligocene of Libya.

D. Pons: On a fossil compression of Moraceae (Mesa Formation, Columbia).

E. Boureau: On the origin and significance of the "black point" in Precambrian organisms of the "Richat of Mauritania".

D. Pons & J. Broutin: Fructifications of Frenelopsis alata (K. Feist) Knobloch (Cenomanian of Anjou, France).

M. Locquin: Mathematic approach of systematics in fungal taxonomy.

B. Alpern & M. Locquin: Studies on sexuality of Chitinomycetes or Chitinozoaires of the Lower Paleozoic.

P. Taugourdeau & M. Locquin: Particular structure of the Chitinozoaire wall.

N. Vaudois-Mieja: On a fossil fruit of Hammamelidaceae in Sabal sandstones of western France.

C. Vozenin: Study of Upper Paleozoic plants from Laos.

- from notes supplied by E. Boureau & A. Lehal-Nicol.

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b. Canadian Botanical Society, Ottawa, June 1979

The symposium entitled "Landmark events in the evolution of plants" contained six lectures which are of particular interest to palaeobotanists. The abstracts which were distributed at the meeting are reproduced below.

H.P. Banks: Time of appearance of biocharacters during Siluro-Devonian time. Megafossils of the first vascular plants permit the recognition of 7 generic assemblage zones during Late Silurian - Devonian time (Banks, in press). Plants in the time range 410 - 395 Ma were leafless, rootless, homosporous, dichotomous, probably centrarch and bore terminal sporangia and exarchy were added. Between 380 - 370 Ma profuse branching, over-topping, various enations, microphylls, adaxial sporangia, leaf traces, paracytic stomata, dehiscence mechanisms, complex fertile lateral branch systems and incipient heterospory were evolved. Subsequent time spans 370 - 365, 365 - 359, 359 - 349, 349 - 345 saw the evolution of successively more advanced characteristics eg cambium, arborescent habit, whorled appendages, megaphyllous leaves, complex fructifications, root systems, certain heterospory, seed megaspores, seeds.

J.A. Doyle: Landmark events in early angiosperm evolution. The first definite records of angiosperms are monosulcate pollen grains with reticulate-columellar and granular exine structure from the probable Barremian of England and Africa, and simple leaves with a hierarchy of vein orders and both pinnate (dicot) and apically closed (monocot) venation patterns from correlative or slightly younger (Aptian) strata of North America and Siberia. Tricolpate pollen, basic to modern dicot sub-classes except Magnoliidae, appears in the Aptian of Africa-South America and the early Albian of Laurasia. The expansion of tricolpates in the Middle to late Albian of Laurasia coincides with the appearance of apparently aquatic peltate leaves (ancestral Rosidae?), and palmately lobed leaves (ancetral Hamamelidales?), and the first local dominance of angiosperms. The first members of the triangular triporate Normapolles complex, which includes probable ancestors of many Amentiferae, appear in the middle Cenomanian (early Late Cretaceous) of Europe and North America.

K.A. Pirozynski: Interactions between fungi and plants through the ages. 95% of present day plants are symbiotic partnerships with fungi. These partnerships involve different kinds of fungi, and were established in different geological times and in different geographical areas. Each appearance of a new partnership was a "milestone" event in the history of plants: each was a macroevolutionary leap brought about by the merging of different genomes, and each gave rise to physiologically and ecologically distinct groups of plants.

W.N. Stewart: The Progymnospermopsida and the classification of gymnosperms. The concept of the gymnosperms (plants with "naked" seeds) as a natural group was first conceived more than 125 years ago. By 1948 fossil evidence was available indicating that the two major evolutionary lines, cycadophytes and coniferophytes, of the Gymnospermae were independent; that the class was not a natural group. The Progymnospermopsida established in 1960 provides a plexus of Devonian vascular plants, Aneurophytales and Archaeopteridales, from which cycadophytes and coniferophytes evolved. It is suggested that the time has come to reinstate the Gymnospermae as a natural unit in the classification of seed plants.

R.A. Stockey: The origin and evolution of conifers. During the last few years there was been an increased emphasis on the study of conifer evolution including various aspects of their reproductive biology. The occurrence of various stelar features as well as trends in the evolution of reproductive structures still point to cordaitalean affinities for the Coniferales. The evolutionary history of such families as the Pinaceae, Araucariaceae and Taxodiaceae are beginning to be elucidated as well as that of certain extinct families including the Cheirolepidaceae and the Voltziaceae. Systematic investigations of fossil cone vasculature and resin canal distribution, leaf cuticles, seed integuments, and embryo structure have not only increased out knowledge of conifer evolution but have also led to changes in our view on the systematics of extant conifer groups.

G.L. Williams & J.P. Bujak: The evolution of dinoflagellates. Two approaches can be taken to reconstruct the paths of dinoflagellate evolution. First, the physiology, biochemistry and morphology of modern dinoflagellates may be examined, but it is often difficult to distinguish morphologically primitive from advanced characters in the modern biosphere. The second approach concerns the fossil record, but one problem here is the incompleteness of this record since most recognisable fossil dinoflagellates belong to the Order Peridiniales which is only one of several orders that are widespread today. Many palynomorphs of uncertain origin (acritarchs) may also be dinoflagellates since it it known that some living dinoflagellates produce cysts similar to certain acritarch taxa. Despite these limitations, progress is being made to reconstruct dinoflagellate evolution. The earliest recorded dinoflagellate is Silurian, but no recognisable dinoflagellate occurs again until the Late Triassic. Following this, dinoflagellates have an abundant fossil record and several lineages can be traced through the Mesozoic and Cenozoic.

IV. RECENT PUBLICATIONS

a. The Carboniferous of the USSR. Ed. R.H. Wagner, A.C. Higgins & S.V. Meyen, Yorkshire Geological Society, 245 pp, 28 plates, £5.50. (available from J. Hartley, Department of Earth Sciences, The University, Leeds 2, England - include more for postage abroad).

This large A4 volume contains English language versions of nine papers presented at the 1975 meeting of the IUGS Subcommission on Carboniferous Stratigraphy, together with an introduction by the editors and a final commentary by A.P. Rotai. There are detailed papers by leading Russian experts on the Devonian/Carboniferous and Carboniferous/Permian boundaries, as well as on the "Stages" which have their stratotypes in the USSR. Thus there are chapters dealing with the Serpukhovian,

Bashkirian and Moscovian, and on the Upper Carboniferous (in the Russian sense), but not the Tournaisian and Visean. The Russian philosophy on stratigraphical division is based on recognition of major faunal and floral changes, and thus the emphasis is heavily biostratigraphical, with views on, among other things, the base of the Carboniferous (taken at a lower horizon than in the rest of the world) and on the mid-Namurian faunal changes, discussed at length. The Russian opinion of what constitutes a Stage roughly equates with what in western Europe would be a Series, and one cannot help feeling it is a bit unambitious. The lack of major faunal changes at the top of the Visean is glossed over. In the light of the views expressed, Rotai presents some gratuitous advice on how the West European Carboniferous should be classified.

Much of the information is presented here for the first time in English and the editors and the Yorkshire Geological Society are to be congratulated on its publication (with the aid of a subsidy from the profits of the Carboniferous Congress held in Sheffield in 1967). These are not simply translations of the Russian papers, for there are 28 plates of fossils which were not in the original versions. These are mainly of foraminifera and conodonts though corals, miospores and megafossil plants are also included. It is good to see these printed on better papers than is commonly found in Russian publications. This volume is essential reading for all Carboniferous biostratigraphers.

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b. The application of an information retrieval system in palaeopalynology for the solution of some taxonomical and stratigraphical problems. M.V. Oshurkova (Ed.), 1978. Yakutsk, Yakutsk State University, 198 pp., 67 kopeks.

This interinstitutional miscellany comprises 5 papers: N.G. Pashkevich - Compilation of polythomic charts for the Devonian miospore diagnostics, N.G. Pashkevich, L.L. Dryagina, L.N. Peterson & L.G. Sukhareva - Miospores of the Late Palaeozoic plants from Middle Siberia, E.G. Petrova - Permian assemblages from the central part of Vilyui syncline and their stratigraphical significance. V.T. Kovalevskaya - Palynocomplexes of the argillite member penetrated by boreholes in the Kempendyai and Ust-Markha fields, Central Yakutiya. M.V. Oshurkova - The application of perfocards in palaeophyological studies. The miscellany is not a book to be read in a train, but mostly a synopsis of Devonian, Carboniferous and Permian miospores. The authors contribute much to the elimination of disagreement between palynologists dealing with Siberian Palaeozoic miospores. The diagnostics of characters and taxa are tabulated in extensive charts ready for computerization. Being an unprofessional palynologist I cannot judge on the advantages and disadvantages of the classification adopted by the authors. But one point, partly provoked by my personal ambition, invites my criticism. The authors totally neglect the data on miospores in situ in Cladostrobus (Maheshwari & Meyen, 1975, Lethaia, 8, 103-123), male fructifications of plants producing Rufloria leaves which dominate in the Angara Upper Palaeozoic. In the dispersed state these miospores belong to Cladaitina; they are monosaccate but often folded to become boat-like, as do their isolated sacci and bodies, thus simulating monocolpate pollen of Ginkgocycadophytus, Entylissa, etc. Multiple modes of preservation of Cladaitina are currently described as different genera and species. Nobody argued against this conclusion, which has simply been neglected in this book. Since the situation concerns a dominating plant group it seems to be an important omission.

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c. Les schistes et calcaires de l'Armorique (Devonien inferieur - Massif Armoricain) - Sedimentologie, Paleontologie, Stratigraphie, by Babin, C., Bigey, F., Brice D., Carls, P., Deunff, J., Goujet, D., Heddebant, C., Jahnke, H., Lafuste J., Lardeux, H., Lejah-Nicol, A., Le Mann, J., Moreau-Benoit, A., Morzadec, P., Paris, F., Pelhate, A., Plusquellec, Y., Poncet, J., Racheboeuf, P., and Weyant, M.

The present report is the second part of a joint research programme about the calcareous formations of the Lower Devonian in the Armorican Massif. The first results concerning the Saint-Cenere Formation (from the eastern part of the "Synclinorium median") were published in 1976 (Lardeux H. coord., Societe geologique et mineralogique de Bretagne, memoir 19, edited with a CNRS support).

The "Schistes et calcaires de l'Armorique" Formation is defined in the western part (Finistere) of the Armorican "Synclinorium median". It is the homologue of the Saint-Cenere Formation previously described and, thus, the present work the consistent continuation of the first study. This formation is well exposed at the Armorique Pointe in Plougastel-Daoulas (Brest roads) where the sections located on the southern and northern coasts were worked out bed after bed.

Fossils were analysed by specialists, this study concerns: spores, algae, palaeoflora, acritarchs, chitinozoans, conodonts, tabulata, bryozoans, brachiopods, molluscs, tentaculites, ostracods, trilobites, crinoids, fishes. More than 150 species are described and the biozonation allows tentative correlations with the type-areas. The quality of the outcrops makes easy a fine study of the litho-faices and some levels, with recifal characteristics for example, permit a good approach of the palaeoenvironments.

Finally, the stratigraphical results lead to precise the position of the boundaries of Gedinnian-Siegenian and Lochkovian-Proguian in the formation.

310 pages, 70 figures, 15 tables, 42 plates. Price 150 francs.
Obtainable from Societe Geologique et Mineralogique de Bretagne,
Institute de Geologie, Universite de Rennes, Avenue du General Leclerc,
35042 RENNES Cedex, France.

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d. Bibliographie des Arbeitskrises fur Palaobotanik und Palynologie 1978

Volume 37 of Cour. Forsch.-Inst. Senckenberg was published in Frankfurt am Main in July 1979 and contains Martin Sturm's 23 page compilation of mainly West Germany palaeobotany and palynology for 1978. It includes details of dissertations published that year as well as work in press and in progress. Copies can be obtained from Professor F. Schaarschmidt, Forschungsinstitut Senckenberg, Senckenbergenlage 25, 6000 Frankfurt am Main, West Germany, price 18 DM.

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e. Facies, a new journal

The journal FACIES will publish articles dealing with the interpretation of ancient biotopes and depositional environments by means of detailed facies analysis. This may include analysis of microfacies and ultrafacies, palaeoecology and palaeobiogeography as well as systematic palaeontology related to facies studies. Syntheses of palaeontological and sedimentological data are particularly welcome. High quality reproduction of photographs is a feature of the journal.

Inquiries should be addressed to: Institute für Paläeontologie, Universität Erlangen-Nürnburg, Loewenichstrasse 28, D-8520 Erlangen, West Germany.

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f. Iowa State Geological Survey Technical Paper No. 6.
"An introduction to the Stratigraphic palynology of the Cherokee Group (Pennsylvanian) coals of Iowa" - R.L. Ravn (1979)

This paper describes in great detail the miospore population from a coal seam in the Cherokee Group of Iowa including data on the distribution of 171 taxa of which 8 are now genera and 13 new species. Palaeoecological reconstructions are proposed based on the distribution profiles of the various miospore taxa. The miospores are well illustrated in 22 plates of good quality.

This publication which is the first of three on this subject may be obtained from the Iowa Geological Survey, 123 N Capitol Avenue, Iowa City, Iowa 52242, USA, for a nominal cost.

Further details can be obtained from Dr R L Ravn at the above address.

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g. Yorkshire Geological Society Occasional Publications
No. 5 Andros Island, Chalk and Oceanic Oozes
Unpublished work of Maurice Black
Editors: C V Jeans and P F Rawson, 1980

This volume contains two major unpublished works of Maurice Black. The first describes the geology of Andros Island in the Bahamas, and represents Black's earliest work on carbonate sedimentology. The second discusses the nature and origin of Chalk and oceanic oozes, and includes mechanical analyses of these sediments. Commentaries on the two chapters are provided by L V Illing and J M Hancock respectively, and the volume is introduced by an appreciation of Maurice Black and an account of his expeditions to Andros, both by C V Jeans.

Other publications in this series:

No. 1. Geological Aspects of Development and Planning in Northern England
Editor: P T Warren, 1970.

No. 2. The Geology and Mineral Resources of Yorkshire
Editors: D H Rayner and J E Hemingway, 1974. (Out of print).

No. 3. The Geology of the Lake District
Editor: F. Moseley, 1978.

No. 4. The Carboniferous of the USSR
Reports presented to the IUGS Subcommission on Carboniferous Stratigraphy at the 8th International Congress on Carboniferous Stratigraphy and Geology held at Moscow, 1975.
Editors: R H Wagner, A C Higgins, and S V Meyen, 1979.

Order Form

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V. NEWS OF OTHER ORGANIZATIONS

a. International Working Group on Upper Paleozoic Compression Floras

There was an informal business meeting of this group at the Urbana Congress and more than 30 people were present. Already there is a list of active workers in the field and there are plans for an exchange of colour slides of types and other important specimens. Members of the group are also being asked to contribute to a bibliography to cover publications which appeared in 1977 and 1978. All details can be obtained from Dr H W Pfefferkorn, Department of Geology, University of Pennsylvania, Philadelphia, PA 19104, USA.

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b. Canadian Association of Palynologists (CAP)

This newly formed organization has recently published its Summer 1979 newsletter. The editor is Jon Bujak, Bedford Institute of Oceanography, PO Box 1006, Dartmouth, N.S., Canada B2Y 4A2.

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c. Asociacion Latinamericana de Paleobotanica y Palinologia (ALPP)

The first edition of a new "Circular Informativa" for ALPP members was distributed in August 1979. Its six pages give details of the membership, meetings and desiderata, together with changes of address. It is hoped to produce this three times a year. For more details contact the President of ALPP, Dr O. Rosler, Instituto de Geosciencias, Universidade de Sao Paulo, Cx. Postal 20899, Sao Paulo, SP, Brazil.

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d. Latinamerican Bibliography on Palaeobotany & Palynology 1978-9

The Asociacion Latinamericana de Paleobotanica & Palinologia (ALPP) Bulletin number 6 will soon be ready for distribution. It contains two short palaeobotanical papers on Permian plant impressions and the 1978-9 latinamerican Bibliography on Palaeobotany and Palynology. Contact the Editor, Dr W Volkheimer, Division Paleobotanica, Museo de Ciencias Naturales de Buenos Aires, Av. Angel Gallardo 470, Buenos Aires, Argentina.

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e. Palaeobotany & Palynology in France, Belgique & Suisse

The latest edition of the Report covers the years 1976-8 and was published in September 1979. This is the second volume and includes details of more than 446 papers published during this period and records the current research and addresses of more than 113 workers. The Report costs 35 F.F. and can be obtained by sending a cheques for this amount payable to "Laboratoire de Paleobotanique" - Dr A Lejal-Nicol, Laboratoire de Paleobotanique, 12 Rue Cuvier, 75005 Paris. The first volume of the Report covers the years 1972-6 and is still available. The price of both volumes together is 50 F.F.

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f. Bibliography of Angiosperm Paleobotany

This is the first Miscellaneous Publication of the International Association for Angiosperm Paleobotany (IAAP) and was compiled by Gary Dolph, Indiana University at Kokomo, 2300 S Washington Street, Kokomo, Indiana 46981, USA. It is available from his for $4.00, though IAAP members need only pay $3.00, including postage. The bibliography lists "Work in Progress", "Work in Press", and "Publications" from data collected from the membership.

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g. American Association of Stratigraphic Palynologists (AASP)

AASP Contribution 5B on Mesozoic Palynology was published in September 1979 - the volume is edited by W W Brideaux and includes articles by W Cornell, A Sweet, M Fisher, G Dorhofer, R. Savey and W Sarjeant. Membership details and order forms for this volume can be obtained from R T Clarke, Treasurer AASP Foundation, Mobil Research & Development Corporation, Field Research Laboratory, PO Box 900, Dallas, Texas 75221, USA.

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h. Australia

A new organization has recently been formed: "Palaeobotanical and Palynological Association of Australia" and its constitution is planned to be available for approval at the 1980 Gondwana Congress in New Zealand. The Secretary is John Rigby, Geological Survey of Queensland, 2 Edwards Street, Brisbane 4000, Australia.

APPENDIX 2 C.I.M.P. DIRECTORY OF MEMBERSHIP

1. Changes of Address

The following members have advised us of recent changes in their address:

CHARPENTIER, Ronald R, Dr
United States Geological Survey
M.S.971, Box 25046
Denver Federal Center
Denver
Colarado 80225
USA

DOLBY, Graham, Dr
Robertson Research Canada Ltd
3rd Floor, Lougheed Building
604 First Street Southwest
Calgary
Alberta T2P 2M8
Canada

HARRIS, Wayne, K, Dr
Western Mining Corporation Ltd
153 Greenhill Road
Parkside
South Australia 5063

MUIR, Marjorie D, Dr
C.R.A. Exploration Pty Ltd
PO Box 656
Fyshwick
A.C.T. 2609
Australia

2. New Members of C.I.M.P.

ARCHANGELSKY, Sergio, Dr
Centro de Investigaciones en
Recuros Geologicos
J.R. Valesco 847
1414 Buenos Aires
Argentina

Late Palaeozoic and Mesozoic palynology and palaeobotany

LIU, Zhao-zheng
Nanking Institute of Geology and
Palaeontology
Academia Sinica
Chi-Ming-Ssu
Nanking
China

Mesozoic palynology

MENDELSON, Carl V, Dr
Dept of Earth & Space Sciences
3806 Geology Building
University of California
Los Angeles
California 90024
USA

Chitinozoa, Sylvan Shale, Oklahoma

KIZANEK, Kazimierz
Institute of Geology
Warsaw University
Al. Zwirki i Wigury 93
02-089 Warszawa
Poland

WARD, Jerome V.
Dept of Botany & Microbiology
Arizona State University
Tempe
Arizona 85281
USA

Albian pollen and spores
Cretaceous plant geography
Chitinozoans and acritarchs

ZHONG, Shi-lan, Dr
Nanking Institute of Geology and
Palaeontology
Academia Sinica
Chi-Ming-Ssu
Nanking
China

Carboniferous & Permian palynology

ALPASLAN, Sahire Idil
Fantoft Studentby
E-920 5036
Fantoft
Bergen,
Norway

Chitinozoa

3. Changes in details already submitted

KOZUR, H, Dr
Staatliche Museen Meiningen
61 Meiningen
Schloss Elisabethenburg
German Democratic Republic

Permian & Triassic megaspores

SHESHEGOVA, L.I, Dr
Institute of Geology & Geophysics
Siberian Branch of Academy of Sciences
630090 NOVOSIBIRSK 90
USSR

Research interests include
Acritarchs and spores.
Not scolecodonts and chitinozoa
as quoted earlier

SLAVIKOVA, K, Dr
Ustredm Ustav Geologicky
Malostranske 19
Praha 1
Czechoslovakia

No longer involved in palynology