

PALYNOLOGOS

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Volume 9, No. 1 - June 1986

NEWSLETTER of the INTERNATIONAL FEDERATION of PALYNOLOGICAL SOCIETIES

SOCIETAL NEWS — PK REPORT

The *Palynologische Kring* (PK) a more or less independent subdivision of the KNGMG (Royal Geological and Mining Society of the Netherlands). It has about 110 members with a professional interest in palynology and/or palaeobotany. The *Kring* is quite active and organizes three meetings every year; these meetings are usually attended by an average of 40 people, depending upon the nature of the scientific program. Although these programs may include a mixture of topics, sometimes they are restricted to a single specialty, e.g., pollen morphology, geochemistry, coal, dinoflagellates, etc.

Once a year there is a meeting with the Dutch-speaking Belgians. This rather informal meeting is called the *Belgisch-Nederlandse Palynologendagen* and has the characteristics of a small symposium lasting two days. The first day is filled with a number of informative lectures and is always concluded with a special dinner. The second day is the excursion day and is devoted to visiting some interesting geological or biological region. In 1984 the *Palynologendagen* were held in Drenthe, where the last living raised bog of the Netherlands occurs. This bog is now a natural reservation and so is protected from further exploitation. The following year these meetings were held in the Peel (southern Netherlands), which is a now nearly completely excavated peat landscape. Here the possible regeneration of the peat was the central theme.

During the past year or so a number of palynological theses were com-

pleted and published. These include:

1. Grabandt, R. A. J. 1985. Pollen rain in relation to vegetation in the Colombian Cordillera Oriental. U. Amsterdam.
2. Hooghiemstra, H. 1984. Vegetational and climatic history of the high plain of Bogota, Colombia: a continuous record of the last 3.5 million years. U. Amsterdam. (J. Cramer Diss. Bot. Band 79).
3. Kalis, A. J. 1984. Foret de la Bresse (Vogezes). Vegetatiekundige en pollenanalytische onderzoekingen naar de bosgeschiedenis van een centraal-Europees middegebergte. (Engl. summary). Univ. Utrecht.
4. Middeldorp, A. A. 1984. Functional palaeoecology of raised bogs — an analysis by means of pollen density dating, in connection with the regional forest history. U. Amsterdam.
5. Van den Berg, R. G. 1984. Pollen morphology of the genus *Begonia* in Africa. Agricultural University of Wageningen Papers 84-3.
6. Dupont, L. M. 1985. Temperature and rainfall variation in a raised bog ecosystem; a paleoecological and isotope-geological study. U. Amsterdam.

(Persons interested in the above publications may either contact the authors directly or the Secretary of the *Palynologische Kring*.

Willem Punt
IFPS Councillor

NEWS FROM GPSBI

(Gruppo di Palinologia Della
Societa Botanica Italiana)

During the past year, three main events attracted the attention of Italian palynologists:

1. An Italian Association of Aerobiology ("*Associazione Italiana di Aerobiologia*") was founded in Bologna on March 23, 1985. The principal aims of this association are the advancement and development of the various aspects of aerobiological studies, including aeropalynology. The 2nd National Congress of Aerobiology was held on the Isle of Capri in April 25-26, 1986.
2. A series of twenty lectures on different palynological topics was held in Modena in September. Invited speakers from many different Italian universities met at the Botanical Institute of the University of Modena in order to describe their palynological research and compare notes with their colleagues.
3. In October the annual National Congress of the Italian Botanical Society ("*Societa Botanica Italiana*") met in Turino; 18 poster displays on palynological and paleobotanical topics were presented.

Maria Follieri
IFPS Councillor
Rome, Italy



7TH IPC UPDATE

The First Circular was mailed to all known palynologists by the Organizing Committee in Brisbane earlier this year. This circular contains basic information concerning the nature of the scientific program, field trips, etc., plus an interest response postcard. If for some reason you have not received a copy of this circular, write to: The Secretary, 7th IPC, Conventions Dept., GPO Box 489, Sydney, NSW 2001, Australia.

3RD IOP CONFERENCE

MELBOURNE AUGUST 1988
(AUSTRALIA BICENTENARY YEAR)

Because of the many interfaces between the fields of palynology and paleobotany, during the past decade the organizers of quadrennial meetings of these disciplines have attempted to schedule them close together, both chronologically and geographically. This tradition continues in 1988; the 3rd International Organization of Paleobotany Conference will meet in Melbourne, Australia, from the 20-27 August. In that the 7th IPC will begin in Brisbane two days later, and since the exchange rate is quite favorable for visitors from most nations, organizers of both meetings are hoping to have a large contingent "doing the IOP-IPC Double."

The First Circular of the 3rd IOPC has recently been distributed; the Second Circular will be sent in September to those who have expressed an interest. For further information, contact: **Jack Douglas**, Geological Survey of Victoria, P.O. Box 173, East Melbourne 3002, Australia.

Computer Searches of the Palynological Literature

DESCRIPTION OF THE DATAFILE—

PALYNODATA, INC. is now offering public access to the palynological datafile produced by the Kremp Palynological Computer Retrieval Research Project. This database contains information from over 8,000 published palynological documents of pre-Quaternary age. By the end of 1986 this number should exceed 12,000 documents.

This unique datafile is unlike any other available for the geological and micropaleontological disciplines. While other databases may offer retrievals of reference citations, summaries or keywords, this datafile provides access to the following types of information:

1. the stratigraphic age and geographic locality of each palynomorph occurrence in a document;
2. whether a taxon of interest is newly described, a new combination, emended or synonymized in the document;
3. the author and title (both in English and original language);
4. the reference citation;
5. the type and number of samples studied, and whether the document contains paleofloristic maps, range charts, comparisons with other areas, megafossil evidence, faunal evidence, microplankton studies, zone fossils, or quantitative data;

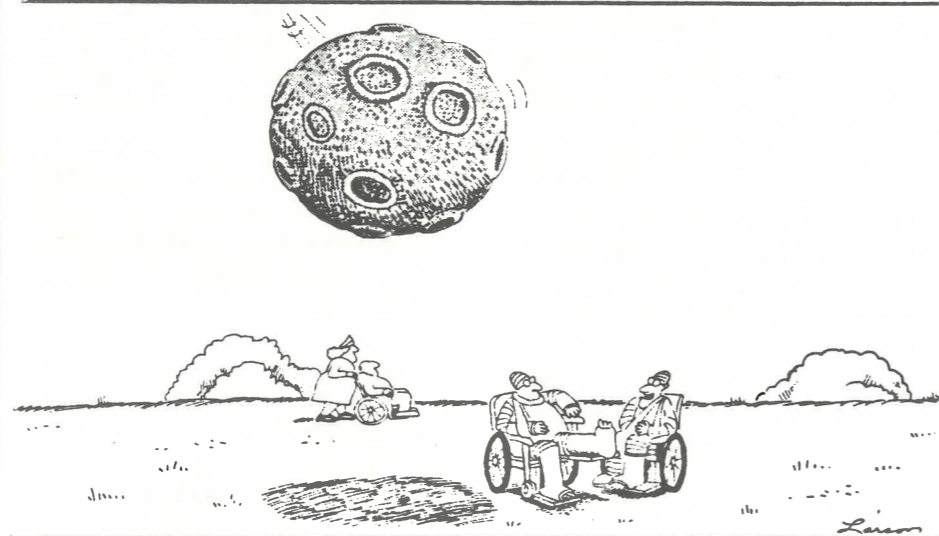
6. the main aspects of the document (stratigraphic, ecologic, taxonomic or morphologic).

LOCATION OF, AND METHOD OF ENTRY TO, THE FILE—

The datafile will be placed on a mainframe computer at Market Compilation Research Bureau/Service Bureau (MCRB/SB) in North Hollywood, California, USA. It will be accessible from nearly any country in the world, seven days a week. The datafile system will be entered by dialing an MCRB/SB telephone number. Users will require no more than a personal computer (with terminal emulation program), a modem, and a modular telephone to gain access to the system.

Interested users can obtain more detailed information from PALYNODATA, INC. Please contact:

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USA



"You're kidding! ... I was struck twice by lightning too!"

IN MEMORIAM - TERESA ZWOLINSKA



Dr. Teresa Orłowska-Zwolinska died on January 13, 1986 in Warsaw at age 50 after almost two years of serious illness. She was not only the best of colleagues, but also a caring, loving, daughter, mother and wife. A truly splendid human being has passed on.

Teresa was born in Piaseczno, Poland in 1935. After completing secondary school, she began her higher education in the Faculty of Geology of Warsaw University, graduating in 1957. Her graduate thesis concerned the paleontological stratigraphy of Upper Cretaceous strata in the vicinity of Turek. Immediately following her graduation, she accepted a position in the Paleobotanical Laboratory of the Geological Institute in Warsaw, where she remained until her recent premature demise.

Initially, her stratigraphic palynological work concerned Liassic and Permian beds, then Rhaetian and Keuperian horizons; during the last dozen or so years she was performing complex micropaleontological studies on Triassic strata. Her bibliography of scientific publication includes 20 papers; in addition, the archives of the Geological Institute contain several unpublished reports that she authored.

As a person, Teresa Orłowska-Zwolinska was of rare modesty and gentleness. As a scientific worker, she was distinguished by thorough inquisitiveness and precise control of all her descriptions, phraseology and conclusions. These qualities could be seen in all her work, beginning with her first descriptions of fossil sporomorphs to the palynostratigraphic synthesis of the Triassic. Her correlation of the Triassic profiles of Poland with those of similar age abroad was based upon her precise taxonomic determinations of species as well as her critical evaluations. It was these somewhat controversial papers that brought her international recognition. Despite her fragile health, nevertheless, she demonstrated her willingness to fight hard in support of her conclusions in this aspect of her research.

Clear up to her final days, despite the terminal nature of her illness and the accompanying pain, she continued to serve palynological science in her normal patient and precise manner. At the very end of 1985 she was still writing dedications of her last papers concerning the palynostratigraphic zones of the Triassic. In this way she was bidding her colleagues farewell; in our opinion, the results of this work has secured her a permanent and prominent place in the world of palynology.

Finally, we bid her goodbye with the comforting words of Shakespeare ... that to die means only to sleep forever. To that we would add our fervent hope that she sleep quietly, without further trouble or pain. In our minds' eye, Teresa Orłowska-Zwolinska will always be seen as we best remember her — concentrating at her microscope or over her papers, smiling, modest and kindhearted.

Sonia Dybowa-Jachowicz
Geological Institute
Sosnowiec, Poland

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TREASURER'S REPORT IFPS MEMBER SOCIETY DUES PAYMENTS 1984-1985

SOCIETY	1984	1985
AASP (USA)	+	+
ACP (Africa)	+	-
ALPP (Lat. Amer)	-	-
APLE (Spain)	+	+
APLF (France)	+	+
APP (Germany)	-	-
BMS (Gt. Brit.)	+	+
CAP (Canada)	+	+
CIMP (Paleozoic)	+	+
CPS (Scandinavia)	+	+
GPSBI (Italy)	+	+
OCP (Czech.)	-	-
PK (Netherl.)	+	+
PPAA (Austral.)	+	+
PSC (China)	-	+
PSI (India)	-	-
PSJ (Japan)	+	+
PSL (India)	-	-
PSP (Poland)	+	+
SPC (Turkey)	+	+

+ = Dues Paid.

- = Dues unpaid and now owing.

(as of June 1, 1986.) **David M. Jarzen**
Secy. - Treas. IFPS
Ottawa, Canada



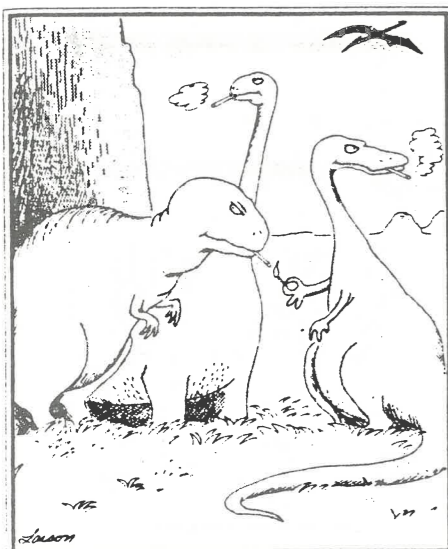
"He counts pollen for a living."

HISTORY OF INTERNATIONAL MEETINGS ON PALYNOLOGY

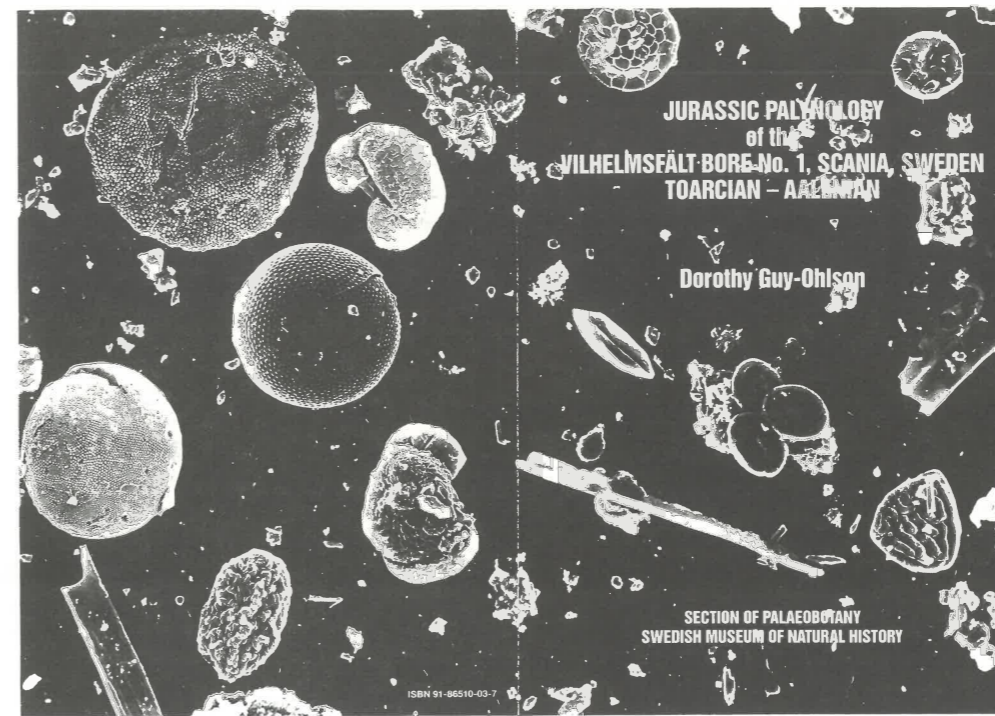
YEAR	DATES	MEETING TITLE	VENUE	PRINCIPAL ORGANIZERS
1962	23-27 April	International Conference on Palynology	University of Arizona Tucson, Arizona, USA	T. L. Smiley & G. O. W. Kremp
1966	29 Aug.-3 Sept.	2nd International Conference on Palynology	State University of Utrecht, Netherlands	F. P. Jonker & A. A. Manten
1971	19-25 July	3rd International Palynological Conference	Academy of Sciences, Novosibirsk, USSR	A. L. Yanshin & E. D. Zaklinskaya
1976/77	29 Dec.-5 January	4th International Palynological Conference	Birbal Sahni Inst. of Palaeobotany, Lucknow, India	D. C. Bharadwaj, S. C. D. Sah, & K. M. Lele
1980	29 June - 6 July	5th International Palynological Conference	University of Cambridge, Cambridge, UK	N. F. Hughes
1984	26 August - 1 Sept.	6th International Palynological Conference	University of Calgary, Alberta, Canada	L. V. Hills & J. Jansonius
1988	28 Aug. - 2 Sept. (as now scheduled)	7th International Palynological Congress	University of Queensland, Brisbane, Qnld, Australia	G. Playford & N. DeJersy

DANISH PALYNOLOGISTS VISIT THE GRAND CANYON STATE

Last September Drs. K. Raunsgaard Pederson and Else Marie Friis (upper right photo), both affiliated with the Geological Institute of the University of Aarhus, spent several days touring Arizona with their hosts, Jim and Peggy Canright, culminating with a hike down into the depths of the Grand Canyon of the Colorado River.



The real reason dinosaurs became extinct



JURASSIC PALYNOLOGY of the VILHELMSFÄLT BORE No. 1, SCANIA, SWEDEN TOARCIAN - AALENIAN

This book (full scale size: 21 x 30 cm) describes in detail the palynological investigation of 17 core samples of varying lithology from the interval 140-171 metres of the Vilhelmsfält Bore No. 1, NW Scania, southern Sweden. The rich, well preserved palynological assemblage consisting of spores, pollen grains, dinoflagellates, acritarchs and other organic-walled microplankton found on examination of the prepared samples includes over one hundred species. These are documented, described where necessary, and arranged systematically, the majority being depicted either as photographs or scanning electron micrographs in the 18 plates illustrating the book.

The absolute numbers of individuals for each species per sample have been recorded. Due to the very rigid control of the preparatory techniques used, the numerical results for each sample are directly comparable. The recorded palynomorphs have been grouped, in the first place, according to their known published (European) stratigraphical range. The distribution and variation throughout the Vilhelmsfält sample interval of the number of species, respectively number of individuals, belonging to each group have been examined. Thereafter the distribution within the sample interval of specific species belonging to each group has been studied. Combining the aforementioned results with the known range of selected species of stratigraphical importance, it has been possible in Sweden to establish three assemblage zones for the upper part of the Rydebäck Member of the Rya Formation. Statistical treatment (cluster analysis) of the numerical results has confirmed this zonation. The presence in this core interval of the ammonite *Dactylioceras cf. tenuicostatum* has facilitated comparison especially with other European Toarcian palynological assemblages of known ammonite zonation. The results of the investigation, often presented in tabular form in the 14 figures included in the text, indicate that the

position of the sediments has occurred in alternating environments, mainly marine and brackish. The thermal alteration index value of 3 indicates a certain amount of organic maturation, but the sediments are immature with only a low hydrocarbon energy source potential. An interesting aspect of the investigated sample interval is the presence of numerous, reworked Carboniferous spores.

This book aims at illustrating not only the scope of the possibilities of a detailed numerical approach to palynostratigraphy, but also the use of certain statistical treatments to facilitate, elucidate and even to check biostratigraphical and palaeoecological interpretations and correlations.

To order a copy - fill in the form below. Your order will be dispatched on receipt of your remittance.

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Map of the area dealt with in the Northwest European Pollen Flora (hatched).

THE NORTHWEST EUROPEAN POLLEN FLORA (NEPF)

The goal of the authors of the NEPF is to study, describe and illustrate the pollen grains of all seed plants that are native to northwestern Europe, as well as the spores of a number of important lower plants (e.g., ferns and mosses). It is hoped that this series will prove to be of considerable value to Quaternary palynologists, plant taxonomists, aeropalynologists and melitopalynologists. The systematic basis for the NEPF is the *Flora Europaea*.

The editors now plan to publish one volume every three years. If possible, the next volume (V) will be published in 1987. The major families being studied in preparation for this volume include the Ranunculaceae, Polygonaceae and Malvaceae. Research is also in progress on the pollen of the Liliaceae, Compositae (Tubuliferae), Rosaceae, Caryophyllaceae and several other large families; the results of these studies will be published in subsequent volumes.

As originally planned, the series will contain 10 or 11 volumes. If the present frequency of publication is maintained, this means that the last volume will appear after the turn of the century. Although the present editors may not be able to complete the entire series, both of the sponsoring organizations (British Museum of Natural History and the State University of Utrecht) have guaranteed to finish the project.

This series is being published as part of the journal *Review of Palaeobotany and Palynology* (Elsevier, Amsterdam). The first four volumes are also available in hard covers from the publisher.

W. Punt, Co-editor NEPF

Géographie physique et Quaternaire

Editor: Pierre Gangloff

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BOOK REVIEW

Sporomorphs of the Neogene in Hungary, Eszter Nagy, *Geologica Hungarica, Series Palaeontologica, Fasciculus 47*, 1985, 471pp, 118 plates, (no price listed).

In this large-format, hard-bound book, about 600 species of fossil spores and pollen of Miocene age from various localities in Hungary are treated. Three genera and 60 species are described as new. The brief introduction is presented initially in Hungarian and later in English, and the new taxa are described in both languages, but the main text is in English. Sample material studied was mostly from cores obtained by the author from geologists involved in mapping of the Neogene sequences of the Mecsek Mountains and northern Hungary; mines and outcrop sections were sources of some samples. Illustrations are provided for all species on 118 plates of good quality; most are transmitted-light photomicrographs, but a few scanning-electron micrographs are included. At first glance the book seems an impressive compendium. Closer inspection, however, raises serious questions about the lasting value of this work to palynology.

The study purports to cover "all stages of the Neogene," but it actually is limited to the Miocene (Egerian through Pannonian, for those familiar with the local stage names); no stratigraphic chart showing the relative positions of sampled sections or correlations of the local stages is provided. A sketch map showing the general location of the study area and major localities would have been helpful. A summary comparing the palynomorph assemblages treated here with others previously described from the Neogene would have greatly increased the value of the work to other palynologists in the international community.

The taxonomic organization is difficult to ascertain precisely. Bryophytes include 34 species (not 38 as stated) in nine genera; one genus and two species are described as new. According to the summary on page 12, 253 species of pteridophytes are treated, but on page 215 it says 252, and I counted only 238. Among

these, the author admits to having described 39 as new; I counted 40. The pteridophyte species are distributed in 42 genera, one of them new. Gymnosperms include either 109 (p.16), 110 (p.215), or 106 (my count) species; one genus and ten species apparently are new. Angiosperms by any count seem to be much less diverse than the combined cryptogam-gymnosperm assemblages: I counted 90 genera and 199 species; the author tallied 93 and 89 genera (pp. 18 and 215, respectively) and 207 species. Subspecific and family-level taxa counted as species may account for some but not all of these discrepancies. Minor lapses in bookkeeping certainly can be forgiven in a massive work such as this, but there are some matters of taxonomic procedure that are more serious.

The author states that "... new taxa are described only if they possess very different and characteristic morphologic features" (p. 54). How is it, then that five new species names for ordinary pinaceous bisaccates are added to a list herein that already includes more than 40? Does palynological science really benefit from another new name for ephedroid pollen, when the author has already listed and illustrated a half-dozen virtually indistinguishable species of the same type? Concise keys to species, or charts comparing and distinguishing similar forms, might have addressed these problems. But ultimately, what biostratigraphic, paleoecologic, or paleoclimatic purpose is served by attempting to distinguish these species, or similarly by listing 22 species and subspecies of sphagnacean spores (among which nine are represented by single specimens)?

From a practical standpoint, because only new taxa are described in any detail, this atlas of more than 600 Neogene spores and pollen is of little use in identification except by the picture-book approach; discussions of previously-named taxa are limited to nomenclatural comments and occurrence data. One could object to the author's nomenclatural procedure also. For example, some names are used that are either later synonyms of other validly published

names (*Polypodiisporites*, *Pinuspollenites*, *Tsugaepollenites*, *Englehardtoidites*), or their nomenclatural status is questionable (*Ephedripites*, *Liriodendronpollenites*). Such objections may be somewhat subjective, however.

Of greater concern is the fact that 25 of the author's 60 new species are based on only one or two specimens. If one agrees that this is poor taxonomic practice, even more unacceptable is that two of the three new genera proposed in this volume are based on type-species represented only by single specimens. Palynology is not well-served by work of this kind. In closing remarks, the author states that the next step following this taxonomic compilation will indeed be its application to biostratigraphy, paleoecology, and paleoclimatology. One wonders if such a worthwhile goal can really be accomplished on the basis of this publication.

Douglas J. Nichols
U.S. Geological Survey
Denver, Colorado

STATUS OF WORLD DIRECTORY

Robert Fensome and Bernard Crilley of the Canadian Geological Survey have been given a joint responsibility for the completion of the *World Directory of Palynologists*. They report that they have now computerized the membership lists of all societies affiliated with IFPS, with the exception of the German, Latin American and Indian groups. Recent additions to the *World Directory* include the sizeable membership of the International Association for Aerobiology, the "Round-Brown" list of dinoflagellate specialists, and a partial list of acritarch workers.

In order to improve the capabilities of the *World Directory*, it is requested that all palynologists complete and mail the attached questionnaire.

See Page 7

Name: _____

Full Address: _____
(if appropriate, include affiliation in full) _____

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(Please use no abbreviations. Also, give your address in the local language if this language is written using the Latin alphabet. If not, give your address in English.)

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(if applicable) _____

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My Telephone Number is: _____

I am a member of the following palynological societies: _____

Principal Palynological Interest(s) (maximum of five):

Acritarchs	Evolution	Mellitopalynology
Actinopalynology	Fossil Dinoflagellates	Paleogeography
Aerobiology	Living Dinoflagellates	Morphology
Archeology	Kerogen/TAI analysis	Scolecodonts
Biostratigraphy	Pollen	Taphonomy
Chitinozoans	Spores	Technology
Environments/climate	In situ spores/pollen	
Other (please specify): _____		

Geological age (please specify): _____

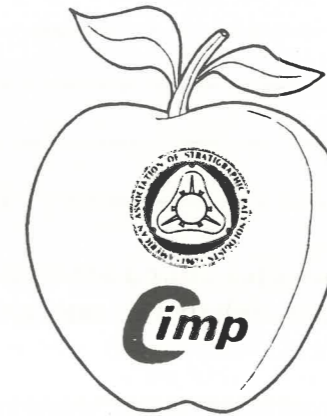
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(As the Directory will be updated periodically, please keep us informed if your address changes).

FUTURE MEETINGS OF INTEREST TO PALYNOLOGISTS

- August 4-6, 1986
SPOROGENESIS IN ARCHEGONIATES (both living and fossil), Stockholm, Sweden. (Dr. E. Sheffield, Dept. of Botany, Univ. of Manchester, Manchester M13 9PL, U.K.).
- August 6-9, 1986
3RD INTERNATIONAL CONFERENCE ON AEROBIOLOGY, Basel, Switzerland. (Dr. Ruth M. Leuschner, Dept. of Research, Div. Dermatology/Allergology, Kantonsspital, CH-4031 Basel).
- August 17-22, 1986
CIRCUM-PACIFIC ENERGY AND MINERAL RESOURCES CONFERENCE, Singapore. (Sondra Biggs, Conference Manager, Amer. Assoc. Petroleum Geologists, P.O. Box 979, Tulsa, OK, USA 74101).
- September 8-12, 1986
PALEOOCEANOGRAPHY (2nd International Conference), Woods Hole, USA. (W. A. Berggren, Woods Hole Oceanographic Institute, Woods Hole, MA 02543).
- September 23-26, 1986
VI COLOQUIO SOBRE PALEOBOTANICA Y PALINOLOGIA, Mexico, D.F. (Dr. E. Martinez-Hernandez, Inst. of Geology, UNAM, 04510 Coyoacan, Mexico City, Mexico)



- October 26-29, 1986
PETROLEUM GEOLOGY OF NW EUROPE (3rd Conference), London, U.K. (Petroleum Geology of NW Europe Conf. '86, Conference Co-ordinates, 70 Richmond Road, Twickenham, Middlesex TW1 3BE, U.K.)
- October 29-31, 1986
AMERICAN ASSOCIATION OF STRATIGRAPHIC PALYNOLOGISTS (Annual Meeting with Congres Internationale du Microflore Paleozoique), New York, USA (Dan Habib, Graduate School of the City University of New York, 33 West 42nd Street, New York, NY 10036).
- November 10-13, 1986
GEOLOGICAL SOCIETY OF AMERICA (Annual Meeting), San Antonio, Texas, U.S.A. (Meetings Department, Geological Society of America, P.O. Box 9140, Boulder, Co 80301, U.S.A.)
- January 27-30, 1987
CANADIAN REEF RESEARCH (Symposium), Banff, Alberta, Canada. (Canadian Reef Research Symposium, The University of Calgary, Conference Office, Faculty of Continuing Education, 2500 University Drive NW, Calgary, Alberta, Canada T2N 1N4)
- April 28-May 7, 1987
ZECHSTEIN: STRATIGRAPHY-PALEOGEOGRAPHY-GEOCHEMISTRY (International Symposium), Hannover/Kassel, F.R.G. (J. Lepper, Niedersachsisches Landesamt fur Bodenforschung, P.O. Box 51 01 53, D-3000 Hannover 51, F.R.G.)
- July 24-August 1, 1987
XIV INTERNATIONAL BOTANICAL CONGRESS, Berlin (West) Germany. (The Second Circular is now available from: The Secretary, XIV IBC, Konigin-Luisse Strasse 6-8, D-1000 Berlin 33).
- August 17-20, 1987
SECOND INTERNATIONAL SYMPOSIUM ON THE DEVONIAN SYSTEM, Calgary, Alberta, Canada. (First Circular is available from: Canadian Society of Petroleum Geologists, 505-206 7th Ave, SW, Calgary T2P 0W7).
- August 1987
PACIFIC NEOGENE PALEOOCEANOGRAPHIC AND BIOSTRATIGRAPHIC EVENTS (Meeting), Berkeley, Calif., USA (Dr. C. Brunner Department of Paleontology, University of California, Berkeley, CA 94720, U.S.A.)
- August 20 - 30, 1987
PACIFIC SCIENCE ASSOCIATION (16th Congress), Seoul, South Korea. Section B: Solid Earth Sciences (Prof. Bong Kyun Kim, Department of Geological Sciences, College of Natural Sciences, Seoul National Univ., Seoul, South Korea)
- September 7-11, 1987
CARBONIFEROUS STRATIGRAPHY AND GEOLOGY (11th International Congress), Beijing, People's Republic of China. (Prof. Yang Jing-zhi, Nanjing Institute of Geology and Palaeontology, Chi-Ming-Ssu, Nanjing, People's Republic of China).

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