



PALYNOS

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The NEWSLETTER of the INTERNATIONAL FEDERATION of PALYNOLOGICAL SOCIETIES

PRESIDENTIAL VALEDICTION

As my four-year term in office comes to an end at the conclusion of the 9th International Palynological Congress in Houston later this month, it is time for me to attempt to summarize the main changes that have occurred in IFPS during my stewardship.

After a long-term series of negotiations, in 1994 the International Association for Aerobiology (IAA) notified us that the members of their society had voted to affiliate with our Federation. Although the IAA has over 600 members, only about 100 designate themselves as palynologists. Accordingly, we have established their dues structure based on the number of copies of PALYNOS shipped to their society, rather than total membership. This is a somewhat similar arrangement to that previously worked out for the only other international specialist society affiliated with IFPS, viz., Commission Internationale de Microflore du Paléozoïque (CIMP).

At the beginning of the current year, we were pleased to welcome another society to membership in IFPS--I refer to the International Association of African Palynology (IAAP), comprised of 83 members carrying out research on some aspects of palynology in Africa.

Thus, despite a slight shrinkage in membership experienced by the North American palynological societies (mainly due to "downsizing" in the oil industry), the addition of two new societies, plus impressive gains in membership in several European affiliates, particularly in The Netherlands (PK), Scandinavia (CPS) and Russia (RPC), has pushed IFPS membership to an all-time high of over 3,000. In the fall of 1993 the increasing costs of publishing and mailing PALYNOS caused us to propose a change to the first IFPS by-law, viz., to increase societal dues from US \$1 to US \$1.50 per individual member. This recommendation was approved by the IFPS Council in 1994, as well as a new by-law stipulating that affiliated societies that were delinquent 8 months after the annual dues deadline (May 1) would be placed on inactive status. I am pleased to announce that all 23 affiliated societies in IFPS have been fully

paid up during the past two years.

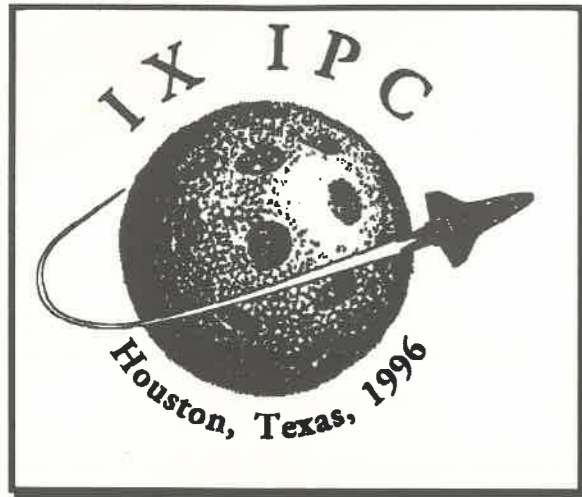
A real windfall occurred for palynologists in February of 1994 with the publication of the 72-page "Glossary of Pollen and Spore Terminology." Over the years we had reviewed several drafts by the Working Group on Palynological Terminology and were pleased with their progress, yet were concerned about how IFPS could pay for its publication and distribution. Fortunately, the University of Utrecht's LPP Foundation (headed by the current Past-President of IFPS, Henk Visscher) stepped in and paid all expenses for this beautifully edited and illustrated booklet. The LPP Foundation and the four dedicated authors (Wim Punt, Stephen Blackmore, Siwert Nilsson and Annick Le Thomas) deserve the gratitude of all palynologists.

The "World Directory of Palynologists" was originally published by IFPS in 1988, just prior to the 7th IPC in Brisbane. Now, eight years later, due to the many changes that have occurred in the palynological community, the IFPS Council decided that it is time to publish a second edition. Owen Davis assumed the responsibility for this major undertaking and spent a considerable amount of time corresponding with the secretaries of all affiliated societies in order to bring currency to the database. Despite a lack of subvention from either IUBS or IUGS, we hope to be able to publish this second edition in time for distribution at the 9th IPC.

In closing, I wish to thank those who have helped me guide this administration--particularly Owen Davis, the Secretary-Treasurer, John Wrenn, the Editor of PALYNOS, and all IFPS Councillors.

Finally, it is my pleasure to announce that you will be seeing and hearing a lot more from Owen Davis, because he has been elected to the presidency of our Federation for the 1996-2000 term of office.

James E. Canright
President IFPS
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UPDATE

9TH International Palynological Congress JW Marriott Hotel, Houston, Texas June 23-29, 1996

By the time you read this the 9TH IPC will be less than one month away. The Organizing Committee has been working hard to get everything in order for the meeting, and it is all falling into place; although there is a mountain of odds and ends left to take care of in the next few weeks. New things come up each day but, never fear, they will all be transparent to those attending. Three months back when we had nine registrants we wondered how many to expect by June. Well, we can report at the time of this writing (May 8) there are more than 400 people registered, and these people have submitted more than 400 abstracts for oral presentations, and about 130 poster presentations. The JW Marriott folks have been especially helpfully in scheduling and planning our meeting; the proximity of all the meeting rooms will make moving from session to session very easy.

Key events at the meeting include:

1. Registration will begin at 1 p.m. on Sunday, June 23.
2. The opening Plenary Session will be held on Sunday from 5-6 p.m. and will be followed by a welcoming reception.
3. Symposia and Technical Sessions will begin at 8 a.m. on Monday, June 24.
4. Buses will be available for trips to Space Center Houston on Tuesday, Wednesday and Thursday (June 25-27).
5. The AASP Business Luncheon will be on Wednesday (June 26) from 11:30 to 1:00. Tickets will be sold at the registration desk. Note: seating will be limited to 200 people, so buy your tickets early.

6. The Congress Banquet will be held on Thursday evening (June 27) starting at 7 p.m. The food will be Tex-Mex style. Additional tickets will be available.

Several IFPS Member Societies have scheduled business meetings at the 9th IPC, these include:

- Sunday, June 23, 4-5 p.m., Galveston Room
IFPS Council Meeting
- Monday, June 24, 6-9 p.m., Dallas Room
AASP Board Meeting
- Monday, June 24, 6-8 p.m., Galveston Room
Collegium Palynologicum Scandinavicum
- Tuesday, June 25, 7-8 p.m., Dallas Room
CIMP Meeting
- Tuesday, June 25, 8-10 p.m., Dallas Room
Acritarch Subcommittee
- Tuesday, June 25, 7-9 p.m., Galveston Room
CAP Meeting
- Thursday, June 27, 6-7 p.m., Galveston Room
IFPS Council
- Friday, June 28, 6-8 p.m., Dallas Room
AASP Board Meeting

Please check at the registration desk for additional IFPS member society meetings not currently scheduled.

Field trips run before the congress will visit Wyoming (A2), Georgia and areas as far west as Houston (A3). After the congress, several field trips will visit the Houston area, Central Texas (B1, B2 and B3), and the National Parks in the desert southwest (B4).

The following items will be for sale at the Registration Desk:

- Congress Banquet tickets - \$25.00 (only 50 extras available)
- T-shirts bearing the congress logo - \$10.00
- Coffee mugs bearing the congress logo - \$5.50.
- AASP Luncheon tickets - \$13.00 (limited to a total of 200 participants)

In addition to the above items, the AASP Foundation will sell its publications at the congress. The long-awaited 3-volume set of the *Palynology: Principles and Applications*, edited by Jan Jansonius and Colin McGregor, is expected to be published in time for the congress, as will Volume 20 of *Palynology*, which is out early this year.

If you still want to come to the congress, contact Vaughn Bryant, Jr.; it may not be too late. We look forward to meeting all of you who come to Houston.

The Organizing Committee
9th International Palynological Congress

First IFPS Council Meeting

PROVISIONAL AGENDA** JW Marriott Hotel, Houston, TX Galveston Room 4-5 p.m. Sunday, June 23, 1996

1. Approval of agenda
2. Introduction of Councillors (or their representatives)
3. President's "State of the Union (IFPS)" Address
4. Secretary-Treasurer's report
 - a) membership status
 - b) financial status
5. PALYNOS editor's report
6. Archivist's report
7. Results of presidential election
 - a) Appointments of new executive officers
8. Affiliate society affairs
 - a) Disaffiliation (PSI)
 - b) New affiliations (IAA and IAAP)
 - c) Society name change (PTPB)
9. Publications
 - a) Glossary of terms
 - b) World Directory (2nd edition)
10. 10th IPC, host and venue
11. Old business
 - a) By-law additions and changes
12. New business
13. Adjournment

**NOTE: This meeting is for current IFPS Councillors (viz., those serving during the 1992-96 term) or their authorized representatives. New Councillors (1996-2000 term appointees) are welcome to attend, but will not be eligible to vote on any motions that occur in this meeting.

James E. Canright
President, IFPS

Second IFPS Council Meeting

PROVISIONAL AGENDA JW Marriott Hotel, Houston, TX Galveston Room 6-7:00 P.M., Thursday, June 27, 1996

1. Approval of Agenda
2. Introduction and Appointment of New Officers and Councillors
 - a) IFPS Constitution
 - b) Membership Directories
 - c) Dues
3. World Directory of Palynologists
 - a) Frequency of Printing
 - b) Method of Distribution

4. Explanation of selection process for 10th IPC
5. New Business
6. Adjournment

**Note: This meeting is for incoming IFPS Councillors or their authorized representatives, including those appointed by affiliate societies for the term 1996-2000. Only Officers and Councillors for the term 1996 - 2000 are eligible to vote at this meeting.

Owen K. Davis
President-Elect, IFPS

IFPS ANNOUNCEMENTS



DR. EMILE ROCHE

Dr. Roche earned a PhD in Natural Sciences (Botany) at Brussels University. He is currently a palynologist at the Royal Museum of Central Africa (Tervuren) and Lecturer at the Liège University (Belgium). Dr. Roche specializes in the Tertiary palynology of Europe and Quaternary palynology of Africa. He is the Secretary of PPMB (Palynologists and Plant Micropaleontologists of Belgium) and Secretary-Treasurer of IAAP (International Association of African Palynology). From 1983-1992 he was Vice-President of APLF (Association des Palynologues de Langue Francaise). Dr. Roche is a member of APLF and of AASP (American Association of Stratigraphic Palynologists) and works on Scientific Development Projects in Tunisia, Burundi, Tanzania, Madagascar. He will be the new IFPS Councillor for the PPMB.

Dr. Eckart Schrank: Change of Address

Dr. Eckart Schrank, the Councillor for APP (Arbeitskreis für Paläobotanik und Palynologie) has relocated. His new address is:

Dr. Eckart Schrank
Institut f. Angew. Geowiss. II
TU Berlin, Sekr. EB 10
Ernst-Reuter-Platz 1
D-10587 Berlin, Germany



ANNOUNCEMENTS

NEW SECRETARY

The new General Secretary of the APLF is Madame Edwige Masure. She replaces Madame Monique Schuler. Madame Masure's address is:

Madame Edwige Masure
Université Pierre et Marie Curie
Laboratoire de Micropaléontologie
4, Place Jussieu
F-75230 PARIS cedex 05, France

WILLIAM A. S. SARJEANT HONORED

Canadian paleontologist and geological historian, Professor William Antony S. Sarjeant, was one of two geologists elected this year to a Fellowship of the Royal Society of Canada. His citation reads:

"William Sarjeant, University of Saskatchewan, has not only published numerous significant articles on fossil vertebrate footprints and fossilized microplankton but has also become a well-known authority on the history of geology. His book on fossil and living dinoflagellates is recognized as a leading text. Publications on acritarchs have received wide acclaim. His international bibliography covers all publications in the Latin alphabet pertinent to the history of geology from its beginnings to 1984. The only one of its kind, and one which has brief biographies of authors as well as references, it has become an invaluable research tool for geologists and historians."

Professor Sarjeant has been a member of the Faculty of the Department of Geological Sciences, University of Saskatchewan, since 1972. He was a joint recipient of a Golden Trilobite Award from the Paleontological Society for his participation in the writing of *A Classification of Living and Fossil Dinoflagellates* and has also received the Sue Tyler Friedman medal of the Geological Society of London, the Founders' Medal of the Society for the History of Natural History, and the History of Geology Award of the Geological Society of America. Under the pen-name Antony Swithin, he has published four novels of historical science fantasy, under the series title, *The Perilous Quest for Lyonesse*. A second Supplement to his bibliographical *Geologists and the History of Geology*, in three further volumes, is scheduled for publication early in 1996.

(Reprinted from the Newsletter of the American Association of Stratigraphic Palynologists.)

"PALAEOBOTANICAL SOCIETY VS BIRBAL SAVITRI SAHNI FOUNDATION"

In connection with the ownership of assets/property of late professor Birbal Sahni, FRS and late Padmshri Savitri Sahni, the "Legal proceedings are going on between the Paleobotanical Society and the Birbal-Savitri Sahni Foundation."

Submitted by:
Dr. H. P. Gupta
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India



Terah L. Smiley
1914-1996

Quaternary science lost a stalwart friend on February 29, 1996, when (Ted) Terah L. Smiley passed away at 82 years of age. Few have done more to promote Quaternary studies in such a selfless way. The Tree Ring Laboratory and the Department of Geosciences at the University of Arizona exist in their present form through Ted's tireless efforts. From 1958-1960 Ted

served as the Director of the Tree Ring Laboratory, and he was the Director of the Geochronology Laboratories from 1956-1967, when it combined with Geology to form the Department of Geosciences. Ted Smiley welcomed Ernest Antevs to the program and wooed Gerhart Kremp from Pennsylvania State University.

During his 1970 sabbatical in Cambridge, England, Ted established lasting relationships with Richard West, Harry Godwin, and other European Quaternarists. His efforts in the area of Arid Land studies were recognized in 1973 with the "Award for Outstanding Contributions in Arid Zone Research," by CODAZR (The National Committee on Desert and Arid Zone Research). Without Ted Smiley, The First International Palynology Congress (April 23-27, 1962) could not have taken place. Ted Smiley initiated the planning meeting, and provided institutional and logistical support for it. For more than two decades, students, faculty and visitors to Tucson benefited from Ted's kind ministrations. We will all miss him.

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Robert M. Kosanke
1917 - 1996

Robert M. Kosanke, one of the pioneers of palynological research in North America, died April 17, 1996, at the age of 78, at his home in Lakewood, Colorado, after a short illness. Though he had retired from his 30-year tenure in the Paleontology and Stratigraphy Branch, U. S. Geological Survey, in Denver in 1993, he had continued serious research on several projects and was in

his office daily until the end.

Bob was a quiet, serious, and strongly disciplined man of highest integrity. He was careful, logical, thorough, and talented in his work. He also was most generous with his time and talents to students and colleagues. He was dedicated to promoting his sciences and the scientific organizations to which he belonged as an editor, teacher, contributor, officer, administrator, and friend.

Kosanke's introduction to his lifelong commitment to geology, and to research in paleobotany, palynology, and coal geology in particular, came in 1937 when he enrolled in the Physical Geology course at Coe College, taught by L. R. Wilson. Bob had come to Coe College, Cedar Rapids, Iowa, from his home in Park Ridge, Illinois, on a football scholarship. Football practice and team games or trips, required his presence most late afternoons. After Bob missed Wilson's first two afternoon field trips to quarries, sand pits, bogs and glacial features, Wilson was unmoved by Bob's entreaty for special consideration to make up the missed trips with some special reports. Prof. Wilson said acceptable field reports were required to pass the course. At that time, this author (ATC) was the undergraduate assistant in the course. We both roomed at the Y.M.C.A., so after the second field trip (of about 6) Bob came to my room one evening and asked if I could help him. The only solution was to take Bob out on Sundays and retrace the missed field trips with him, explaining as best I could all the features Dr. Wilson had explained. To make the trip more enjoyable for all of us, I included a local woman student, who had a car (a necessity to reach the field sites), and my sister, who was also a student at Coe College. Several similar trips followed the first two "make-up" trips and Bob's reports were more than adequate. Two side-effects, unplanned and unexpected, but with lifelong rewards, emanated from this happening: Wilson encouraged Bob to take up geology as a major and get out of football; and Bob became interested in my sister, Avalonne, without my knowledge. Later, when Bob and I were in Graduate School at University of Cincinnati, Bob and Avalonne were married, March 5, 1941.

Bob enjoyed his program of studies at Coe College and participated in two general reconnaissance and collecting trips, led by Dr. Wilson, to various major geological points of interest in the High Plains, Rocky Mountains, and intermontane basins. In the 1939 trip he was with Wilson's party of 5 or 6 who climbed the Grand Teton. He wrote a Major Honors thesis on microfossils in a pre-Kansan peat deposit in central Iowa under Wilson's direction (Wilson and Kosanke, 1940).

Bob entered graduate school at the University of Cincinnati in the Department of Botany under Prof. J.H. Hoskins. While there he had opportunity to take many courses equally in botany and geology. Special courses in plant morphology, wood anatomy, plant systematics and ecology were particularly valuable to him years later in palynology, paleoecology and research on coal constituents and their origin. He also took several courses in paleontology from Dr. Kenneth E. Caster. His M.S. thesis, under Hoskins' direction, was the first palynological study in the Appalachian Coal region, an analysis of pollen and spores and stratigraphic relationships of the Pennsylvanian age Pittsburgh and Pomeroy coal beds in southeastern Ohio (Kosanke, 1943).

Kosanke continued to take additional courses at Cincinnati until he received Dr. Gilbert H. Cady's offer to join the Illinois State Geological Survey Coal Group in January, 1943. There he met Dr. Jack Simon, who still resides in Urbana, and has remained Bob's closest friend and colleague until Bob's death. Bob worked for a short time with Jim Schopf before Schopf joined the U.S. Bureau of Mines in Pittsburgh. At Illinois, Bob became immediately involved in coal palynology, coal petrography, stratigraphy, and mapping coal resources.

In 1945, Bob entered the doctorate program in Botany at University of Illinois, while continuing his work with the Survey. His dissertation, completed in 1955 under the direction of Wilson Stewart, reported on the morphology of a Pennsylvanian *Calamites* cone, *Mazostachys* (Kosanke, 1955). This was his major paleobotanical research contribution. In 1958 he received a part-time appointment at the University of Illinois as Associate Professor, where he taught graduate classes in palynology.

Kosanke's 1950 treatise on the Pennsylvanian palynoflora of the Illinois Basin was the first major basinwide monograph on a pollen/spore flora in North America. His pioneering report included 100 new species of the 130 sporomorphs differentiated from 50 coal beds sampled in 47 counties. A summary of generic characteristics of 19 genera, 5 new, was included. The report demonstrated in detail the value of palynomorphs in the correlation of coal beds. That paper, together with the Schopf, Wilson, Bentall classic (1944), also published by the Illinois State Geological Survey, are epochal contributions that stabilized North American pre-Quaternary paleopalynology research. Kosanke's palynological research at Illinois was ably carried on by his student, Russel A. Peppers, after Bob left in April, 1963, to join the Paleontology and Stratigraphy Branch of the U.S. Geological Survey as Research Geologist. Peppers' two

memoirs (1964, 1970) amplified Bob's palynology research in the mid-continent.

Dr. Kosanke's research in his 30-year tenure at the U.S. Geological Survey in Denver included two major long-term projects. The first was working with the Kentucky Branch of U.S. Geological Survey on palynological correlation of several commercial coal beds in eastern Kentucky (Kosanke, 1974, 1965-1972). The last was the palynology of the entire Pennsylvanian stratotype section in West Virginia with supporting work in Ohio. Three major publications (Kosanke, 1988a, 1988b, and 1988c) resulted from this comprehensive enterprise. He was called upon for dozens of other research and service projects in between major assignments. His last major contributions were published as a co-author on three chapters in the very recent GSA Memoir 185, 1995, "Historical Perspectives of Early Twentieth Century Carboniferous Paleobotany in North America" (Kosanke and Cross, 1995; Cross, Kosanke, and Phillips, 1995; and Cross and Kosanke, 1995). The latter paper on the history of Carboniferous palynology in North America provides an extensive overview of early palynological research in which he played so major a role.

Bob has been a long-time member of the American Association of Stratigraphic Palynologists (AASP), The Geological Society of America (GSA), the Botanical Society of America (BSA), Paleontological Society (PS), the Society of Economic Geologists (SEG), and the American Association for the Advancement of Science (AAAS). As secretary of the Coal Committee of SEG, 1946-55, Bob, together with colleagues Jim Schopf, Jack Simon, and Gilbert Cady, obtained recognition and permission to hold special technical meetings, symposia, and field trips on palynology and coal geology under the auspices of SEG. These four men were also the founding members of the Coal Geology Division of the Geological Society of America in 1955. Bob was chairman of the Coal Geology Division, 1955-1966 and councilor, 1976-77. He was also secretary three years and later chairman of the Paleobotanical Section. These were the only organizations to regularly sponsor palynology papers and symposia at annual and regional meetings in North America until the founding of AASP in 1967. The Society of Economic Paleontologists and Mineralogists (SEPM) also sponsored two major symposia in which he participated.

Dr. Kosanke received many well-deserved honors and awards. He received the prestigious Geological Society of America Gilbert H. Cady Award for contributions in Coal Geology in 1989, and the Distinguished Service Award (1991) for outstanding contributions to the Coal Geology Division. He was a recipient of the

Paleobotanical Section of the Botanical Society 50th Anniversary Award and he was elected Fellow in several societies. In 1993, the U.S. Geological Survey awarded him the Meritorious Service Award. The Denver Botanical Gardens elected him to Life Membership and presented him two awards for more than 1000 hours volunteer work for each. One event in which he was most honored was in presenting the first Gilbert H. Cady Award to James M. Schopf in 1973.

When I reported his passing to one of his colleagues from the Smithsonian Institution the remark came instantly: "One of the giant pioneer oaks in palynology and coal geology has fallen." We in these collateral sciences will miss him greatly. My sister, Avalonne Jane, his talented wife of 55 years, and his two sons, Robert Charles of California, and Kenneth Raymond of the Denver area, will miss him even more. We are all beneficiaries of his legacy.

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CIMP Acritarch Subcommittee Meeting & Workshop Prague, April 10-12, 1996

The Acritarch Subcommittee of the Commission Internationale de Microflore du Paléozoïque (CIMP) is currently undergoing a revival after a long period of dormancy following the numerous meetings of acritarch workers in the 1960's and early 1970's. The last of these meetings took place at Bousens, France, in 1973, and gave rise to the collection of papers published in *Review of Palaeobotany and Palynology*, n°18. A very successful joint meeting of the Acritarch and Chitinozoan subcommittees was held in 1991 at Keyworth, Nottingham. (Papers from this conference are published in *Special Papers in Palaeontology*, n° 48, edited by S.G. Molyneux and K.J. Dorning.) The most recent previous meeting of the Acritarch Subcommittee was held in conjunction with the CIMP Palynology, Palaeoenvironments and Stratigraphy Symposium at Sheffield in 1994.

The meeting of the Acritarch Subcommittee held at the Charles University in Prague, Czech Republic was attended by nearly 60 acritarch workers from 26



Participants in the CIMP Acritarch Subcommittee Meeting & Workshop, Prague, April 10-12, 1996

countries. Prague 1996 is the largest meeting ever held by the subcommission, and thus was a major event in its history. An ice breaker was held on April 9th and the official opening took place on Wednesday morning, April 10th, with a welcoming address by Olda Fatka (organizing chair), Prof. Dr. Cepek (Dean of the Faculty of Sciences, Charles University of Prague) and Stewart Molyneux (Chairman of the Acritarch Subcommittee).

Three technical sessions were organized on Wednesday morning (general topics of acritarch research), Thursday morning (Precambrian to Ordovician acritarchs) and Friday morning (Ordovician to Carboniferous acritarchs). About 25 oral contributions and 20 posters were presented. All papers presented at the meeting will be included as extended abstracts or short papers in a special issue of *Acta Universitatis Carolinae, Geologica*, which should be printed in the Autumn of 1996.

The afternoons were reserved for the workshop, microscope and poster sessions. On Wednesday afternoon, Alain Le Hérisse (Brest) and Thomas Servais (Liège) presented a glossary of morphographic terms used in the description of the acritarchs. Ken Dorning (Sheffield) reported on the work of the Taxonomy Working Group. The Acritarch

Subcommission Business Meeting was held on Wednesday evening. On Friday afternoon, numerous workers took advantage of the microscope session to examine and discuss photographs, slides and preparations. Like its predecessor at the Keyworth meeting in 1991, this session gave workers the opportunity to study the material of their colleagues and proved to be very successful.

A guided tour of the historical city of Prague on Thursday afternoon gave participants an insight into one of Europe's most beautiful cities and included a visit to the Old Town, the Jewish Quarter, the Charles Bridge and the Old Square with its famous clock. The gala dinner took place on Friday evening after the closing session of the conference.

Prof. I. Chlupac, Dr. P. Kraft and Dr. O. Fatka led a one-day field excursion on Saturday, April 13th. Important localities in the Palaeozoic area of the Prague Basin were visited, including a stop at the stratotype section of the Silurian/Devonian boundary at Klouk.

The five days of the meeting and workshop were highly successful; everyone benefited from the opportunity for open discussions and enjoyed the relaxed atmosphere of the large family of acritarch

workers. Many workers wish to meet again in a few years and four proposals have been made for the next Meeting and Workshop of the Acritarch Subcommittee. This will probably be organized in 1998, possibly in association with the general meeting of the CIMP.

Submitted by

Thomas Servais
Acritarch Subcommittee Secretary
Paléontologie Animale
Université de Liège, Belgium

and

Stewart G. Molyneux
Acritarch Subcommittee Chairman
British Geological Survey
Keyworth, Nottingham, United Kingdom

Palynological News from Russia

The meeting of the Russian Palynological Commission and the Department of Palaeofloristik of the Geological Institute (Russian Academy of Science) took place during April of 1995. The meeting was dedicated to the memory of Professor Elena Zalinskaya, one of the founders of the Russian Palynological School.

Professor Zalinskaya's brilliant personality stimulated research in the former Soviet Union in such diverse areas of palynology as palynostratigraphy, marinopalynology, palaeofloristik and palaeobiogeography. She organized many palynological conferences and symposia.

Professor Zalinskaya established her own scientific school: her students currently work all over the world. Her scientific talent, breadth of interests, and activities within organizations, as well as her pleasant and affectionate relationships with her colleagues and students will be remembered.

The most emotional part of the meeting was a memorial to Professor Zaklinskaya by her friends and colleagues, including G. M. Bratceva, L. A. Panova, L. V. Rovnina, S. A. Safarova and V. I. Homutova. R. N. Zelinskaya, a painter and very old friend of Elena Zaklinskaya spoke about her youth. The remembrances stirred up many fond memories. R. N. Zelinskaya painted a portrait of Professor Zaklinsky which made it seem she was taking part in the meeting.

At the meeting, Professor M. A. Ahmetev characterized the scientific activity of Professor Zaklinskaya within

the Geological Institute where she worked for more than 40 years. A few short reports about new results of palynological investigations at the Institute were also given.

Dr. Meyer-Melikian (MSU, Moscow) gave a report entitled "Dispersed distal sulcate pollen grains from the Lower Jurassic deposits of West Siberia." A great diversity of inner sporoderm structures was presented using electron microscope photographs. The diversity shows that although very similar in outward appearance, pollen grains belong to different groups of Gymnosperm plants (Pteridospermophyta, Cycadales, Bennettiales).

Dr. O. F. Dzuba of the International Centre on "Biological Control" in St. Petersburg, presented new material concerning the damage to pollen grain structures caused by ecological stress.

A discussion of palynological criteria in stratigraphy and the problems of correlating Late Cenozoic sediments in Northern Europe and Asia was presented by Dr. N. S. Boliknovskaya (MSU, Moscow).

It was decided at the VII Palynological Conference (Saratov, 1993) to hold the VIII Russian Palynological Conference in Moscow at the Institute of Geology and Development of Fossil Fuels (IGIRGI, September 30 - October 5, 1996). The title of the conference will be "Palynology in Biostratigraphy, Palaeoecology and Palaeogeography."

Dr. L. R. Rovnina
President,
Russian Palynological Commission

Dr. N. R. Meyer-Melikian
Member
Bureau of the Russian
Palynological Commission



Submitted by
Mary Dettmann
From: The
Queensland
Health Brisbane
South newsletter
Plexus

Surgical Terms:

Outpatient:	One who's fainted
Dilate:	live long
Enema:	not a friend
Colic:	Sheep dog
Impotent:	Distinguished, well known
Cauterize:	Made eye contact with her
Tumour:	More than one more
Seizure:	Roman emperor



Book Reviews

Supplement to Reille's Atlas

When von Post presented pollen analysis in 1916, fossil grains were no newcomers to Quaternary geology. Since the beginning of the century Scandinavian Quaternary geologists had included pollen grains, and some pteridophyte spores as well, in their fossil lists, identifying them with the help of that all-embracing microscopist, Gustaf Lagerheim, who was also von Post's pollen morphological mentor.

When qualitative pollen observations were replaced by statistical treatment the number of pollen types recognized was still low, some 20 or so forms. If a pollen analyst should observe some foreign pollen grain, he/she would be hard up to make an identification. *Myriophyllum alterniflorum* nonplussed pollen analysts for years. Actually, there were only two pollen floras available. Meinke's (1927) had a wide coverage but the figures were too crude for more than an approximate identification. Erdtman's (1923) was less comprehensive, elegantly drawn, but unfortunately reproduced too small.

Also, the microscopes were not particularly up to the demand for high magnifications, and pollen analysts, coming mainly from geology, not accustomed even to an achromatic lens. Erdtman's warnings (i.c.) against confusing *Viola* and *Quercus* or *Fagus*/*Helianthemum* were much to the point and *Corylus*/*Myrica* an insoluble mystery.

Pre-war pollen analysis was, on the whole, satisfied with the two dozen pollen types represented in Erdtman's little figures and meticulously recorded in his literature reviews (1927 and onwards) until the 1950's. Gradually the list had expanded, especially in papers from outside the classical area of pollen analysis, NW middle and W Europe.

As the need for extended palynological expertise made itself felt, a series of more or less comprehensive pollen floras, dealing with regional taxonomic or ecological groups, came into being. Even so, at the VIII IPC in Aix-

en-Provence (1992) we were all, I think, greatly impressed to learn about Maurice Reille's plan to produce a (semi) complete pollen atlas for Europe (and N. Africa), and delighted to inspect sample pages.

Pollen grains are well-nigh impossible to illustrate satisfactorily on a two-dimensional paper. Problems arise because: 1. They are extremely three-dimensional and have a short radius of curvature, so that only a very narrow belt of the grain is in focus at the same time. 2. They also have an inner structure of great taxonomic importance, which should be shown at the same time. 3. They are transparent/translucent so that the structure (and the inner surface) shine through the out-of-focus part of the surface.

Point 1 is easily dealt with today. Both SEM and drawings can show the surface figuration of a major part of the grain. By digitizing and other photographic tricks, one can also produce a light-optical surface picture. But by that time the paper is full, and there is no room for the structure, which cannot be seen through the opaque paper anyhow. Theoretically, one could print the surface on a transparent film and register that on top of a presentation of the wall structure. It would be a complicated (and expensive) operation, dependent on the use of (non-existent) translucent inks for the upper film.

TEM pictures are not very useful for recognition, but surface SEM and fracture pictures are extremely so, even if they have their limitations and are not immediately applicable in practical analysis because of the complicated preparation techniques.

Very sensibly, Reille has chosen a much more conservative way, presenting for the same grain (taxon) a series of optical sections, actually corresponding to what the microscopist sees when focusing up and down through the grain. This technique necessitates a great number of pictures for each grain and the result is, of course, a series of photos, most of which are out of focus-like what we actually see. In a way, the Atlas presents a very "true" picture. The number of exposures vary from 1-2 for some of the grasses and the micro-grains of Boraginaceae to 25-30 for grains of complicated morphology.

Reille's 1992 Atlas won immediate acclaim and has been a standard help in palynological laboratories ever since. Now, Reille (1995) has produced a supplement as comprehensive as the main volume: 1615 taxa (8082 exposures) against 2276 in the former.

In comparison with the main volume, the supplement gives an immediate even more satisfactory impression, mainly, I think, due to the change-over of the somber

background for a white one. The little gray squares presenting each exposure are less obtrusive on this background. The photos are crisper than in the main volume, which I presume is attributable to the Czech printer who has done a fine job.

What can such a book be used for? Obviously not--in its present state--for keying out an unknown grain. The arrangement is by pollen types, and for the less numerous type classes one may work simply by scanning the pages. For tricolpate and tricolporate grains opportunities that way are limited. In the "Introduction," Reille announces another supplement to come, and suggests that there may be some identification key to come. Highly desirable as that would be, it will at any rate be an enormous work and I feel the only solution--if any at all--would be a multi-entry key obviating the drudgery of the comprehensive table to key out grains with a particular characteristic.

However, the Atlas has another, extremely important function, viz. the negative identification. How often do we not find a pollen grain wondering if that may be XXX. If XXX is represented in the Atlas it is at any rate easy to see that it is not the grain in question. Which is a great help.

In the end, I have two critical remarks of principle. (1) *Bordera pyrenacia* is presented at two places at the same indicated magnification, but, obviously that isn't so: the grains on p. 14 are twice the size of those on p. 38. There are also some other cases where the magnification indicator is obviously not applicable, but most of them are quite simple. (2) As an old taxonomist and museum rat I ask for:

- a- the authority behind the taxonomic identifications, and
- b- the location of voucher specimens--if any. This would add greatly to the credibility of the book.

Considering the importance and size of the book, the price (800 francs) is not unreasonable.

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Third Symposium of African Palynology

All palynologists and other interested persons are cordially invited to attend the Third Symposium of African Palynology, to be held from 7 to 13 September 1997 in Johannesburg, South Africa.

The symposium will be hosted by the Bernard Price Institute for Palaeontological Research at the University of the Witwatersrand, under the auspices of the International Association of African Palynology/ Association Internationale de Palynologie Africaine.

Proposed topics will span the entire range of palynological research in Africa, from palaeopalynology to aerobiology. Contributions not strictly African in nature, but of wider interest, also will be welcome.

In addition to formal scientific sessions, several social functions and excursions are planned.

For further information, contact:
Dr. Ann Cadman
BPI (Palaeontology),
University of the Witwatersrand
PO WITS, 2050, South Africa

FAX: 27 11 403 1423
e-mail: 106caa@cosmos.wits.ac.za

Birbal Sahni Institute To Host Meeting

Birbal Sahni Institute of Paleobotany, Lucknow is organizing a conference on "Physical and Biological Changes Across Major Geological Boundaries" from September 10-12, 1996 on the occasion of its Golden Jubilee Year.

Oral presentations for the following seminars are welcome:
A. Precambrian-Cambrian Transition

- B. Permo-Triassic boundary
- C. Cretaceous-Tertiary boundary
- D. Pleistocene-Holocene boundary

Additionally, presentations on geological boundaries not covered during oral sessions may be made in the "Poster Seminar". For details, write to the meeting Convenor:

Dr. P. K. Maithy
 Birbal Sahni Institute of Paleobotany
 53, University Road
 Lucknow 226 007, INDIA



June 30-July 5, 1996

International Association of Paleobotany, University of California, Santa Barbara, California, U. S. A. Contact: Dr. Bruce H. Tiffney, Department of Geological Sciences, University of California, Santa Barbara, California 93106, U. S. A. Fax: 805-893-2314; E-mail: tiffney@magic.ucsb.edu

September 10-12, 1996

Physical and Biological Changes Across Major Geological Boundaries, Birbal Sahni Institute of Paleobotany, Lucknow. Contact Dr. P. K. Maithy, Birbal Sahni Institute of Paleobotany, 53 University Road, Lucknow 226 007, India.

September 7-13

Third Symposium of African Palynology, International Association of African Palynology/Association Internationale de Palynologie Africaine at the Bernard Price Institute for Palaeontological Research, University of the Witwatersrand. Contact Dr. Ann Cadman, BPI (Palaeontology), University of the Witwatersrand, PO WITS, 2050, South Africa, Fax: 27 11 403 1423; E-mail: 106caa@cosmos.wits.ac.za.

September 11-13, 1996

1st European Symposium on Aerobiology (CA 96), Santiago de Compostela, Spain. Contact: Dr. Maria-Jesus Aira, Departamento de Biología Vegetal, Facultad de Farmacia, Campus Sur 15706-Santiago de Compostela, Spain. Phone: 34-9-81-563100, ext. 4973/4974; Fax: 34-9-81-594912; E-mail: bvaira@usc.es

September 21-23, 1996

6th Canadian Paleontology Conference, Corner Brook, Newfoundland. Contact Dr. Elliot Burden, Department of Earth Sciences, Memorial University of Newfoundland, St. John's Newfoundland, A1B 3X5, Canada. Phone: 709-737-8395; Fax: 709-737-8142; E-mail: etburden@morgan.uccs.mun.ca

September 30-October 5, 1996

VIII Russian Palynological Conference. "Palynology in Biostratigraphy, Palaeoecology and Palaeogeography." Moscow, Russia. Contact Dr. Linda V. Rovnina, Institute of Geology and Exploitation of Combustible Fuels (IGIRGI), Fersman str. 50, 117312, Moscow, Russia, Fax: 095-129-4107.

October 28-31, 1996

Geological Society of America Annual Meeting, Denver, Colorado, U. S. A. Contact: GSA HQ, Box 9140, 3300 Penrose Place, Boulder, Colorado 80301, U. S. A. Phone: 303-447-2020.

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