

# AASP NEWSLETTER

N. O. FREDERIKSEN, EDITOR

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**APRIL 1982** 

#### NOMINATIONS FOR BOARD OF DIRECTORS

The 1982 Nominating Committee presented a slate of candidates for 1982-1983 to the Board of Directors, and the Board unanimously approved the

list, as follows:

President-Elect:

John A. Clendening

Secretary-Tresurer:

Don G. Benson Kenneth M. Piel

Managing Editor:

Vaughn M. Bryant, Jr.

Directors-at Large:

James E. Canright

David K. Goodman Stephen R. Jacobson

Jocelyne A. Legault

Article 7.03 of the AASP Bylaws states that "Additional nominations may be made by any member in good standing by submitting a petition, signed by at least nine (9) other members in good standing, to the Secretary-Treasurer by June 15," for inclusion on the ballot submitted to the membership.

Members of the 1982 Nominating Committee were: Sarah Damassa, chairperson; and Thomas Ager, Lucy Edwards, David Jarzen, and Jeffrey Stein.

#### BIOGRAPHIES OF NOMINEES

#### President-elect:

John A. Clendening:

Year joined AASP: 1968.

AASP offices held and other service: Councilor, 1975-1976; Vice President 1976-1977; Secretary-Treasurer, 1978-present; member, Annual Meeting Committee, Houston; organizer and convener, Pennsylvanian-Permian Boundary Symposium, Phoenix Annual Meeting; Chairperson, Nominating Committee Guidelines Committee; Chairperson, Ballot Committee Guidelines Committee; member, Criteria and Guidelines for Annual Meeting Site Selection Committee.

#### Secretary-Treasurer:

Don G. Benson, Jr.:

Year joined AASP: 1974.

AASP offices held and other service: General Chairperson, 1981 Annual Convention, New Orleans.

Kenneth M. Piel:

Year joined AASP: 1967 (founding member).

AASP offices held and other service: President,
1975-1976; Councilor, 1976-1977; Nominating
Committee; General Chairperson, 6th Annual
Meeting.

Managing Editor:

Vaughn M. Bryant, Jr.

Year joined AASP: 1969.

AASP offices held and other service: Editor; Managing Editor; various committees over the past 5 years including membership on the Publicity Committee.

Director-at-Large:

James E. Canright:

Year joined AASP: 1968.

AASP offices held and other service: President, 1979-1980; member, Nominating Committee, 1973; General Chairperson, 11th Annual Meeting, 1978; AASP representative on ICP Council, 1973-present.

Offices held in other scientific societies:
Founding Editor, ICP Newsletter, 1978-1980;
Business Manager, American Journal of
Botany, 1957-1960; Chairperson,
Paleobotanical Section, Botanical Society
of America, 1970; member, Executive
Committee, AIBS, 1975-1980.

David K. Goodman:

Year joined AASP: 1975.

AASP offices held and other service: Judge, Outstanding Student Paper Award, 1981; reviewer for Palynology, 1980-1982.

Stephen R. Jacobson:

Year joined AASP: 1969.

AASP Offices held and other service: Annual Meeting Committee, 1980.

Offices held in other scientific societies:
Associate Editor, The Mountain Geologist,
1980-present.

Jocelyne A. Legault:

Year joined AASP: 1969.

AASP Offices held and other service: Councilor, 1978-1979; Nominating Committee, 1975; Ballot Committee, 1978-1979.

Offices held in other scientific societies:

Secretary-Treasurer, Canadian Association
of Palynologists, 1979-present; Councilor,
Paleontological Section of Geological
Association of Canada.

AASP Newsletter is published quarterly by American Association of Stratigraphic Palynologists, Inc.

#### TRAVEL PACKAGE TO DUBLIN

Jack Burgess sent this communication:

The following package for travel to Dublin for the AASP meeting has been proposed by Thomas Cook Travel Agency and formulated according to current fares and prices. I will be glad to keep you informed of any increases as the date of travel approaches. I highly recommend the Jurys Hotel as a first class property conveniently located and expertly managed. The airfare is based on a 7 to 130 day excursion which will allow for extention of the package on an individual basis.

I can also send you a selection of tours which I believe you will find of interest and which I will be happy to discuss at your convenience.

AIR: IAH/JFK/IAH PanAm \$270.00 JFK/DUB/JFK AirLingus \$479.00 Round trip total \$749.00

HOTEL: Jurys (7 nights) \$346.00 single \$457.00 double

The airfare round trip Houston-New York-Dublin and return is predicated on a minimum of 20 people. The hotel need not be booked to take advantage of the airfare group rate. However, we must begin compiling names of interested people. The list of names should be completed by June 1, 1982, and include air transport with or without needed hotel accommodations. The final interested participants from this initial list must make payment of airfare 30 days prior to departure, plus one-third total of hotel bill. These costs must be in hand and tickets purchased within the time constraints set by international agreement in order to qualify for the excursion fare.

Dates for the Dublin meeting are Monday, September 13 to Wednesday, September 15, 1982, for the technical sessions with field excursions commencing on Thursday, September 16, through Saturday, September 18, which will conclude the meeting. The group must travel as a unit going and coming. This mandates some hard choices on departure date with possibilities of Friday, Saturday or Sunday, September 10, 11 or 12, respectively. The minimum stay is 7 days, so the next decision is length of stay beyond the mandated 7 days. Traveling the distance to Ireland would suggest some vacation in addition to the first week of sessions and field trip making up a 14 day stay in the Irish Republic. Some such group decision must be made, and the sooner this can be accomplished the better the chance of being able to pick the desired departure and return dates.

Implementation: Parties interested in the proposed travel package notify Jack Burgess, P. O. Box 36506, Houston, Texas 77236 by June 1, 1982.

Notification should include: Preferred departure date - Sep. 10, 11 or 12 Preferred return date - Sep. 19 or later Need hotel accommodations? If response is fewer than the 20 minimum persons by June 1, 1982, those responding will be notifed and they then must make their own arrangements.

# IN MEMORIAM Geneviève Woillard (1948-1981)

The death of Belgian palynologist Dr. Geneviève Woillard was reported in the December, 1981 Bulletin-AQQUA (Bulletin d'information de l'Association québécoise pour l'étude du Quaternaire) in an article by Marie-Anne Geurts. Dr. Woillard was born April 16, 1948 in Arlon, Belgium. She received her doctorate from l'Université Catholique de Louvain in 1974. She received worldwide recognition for publications based upon her doctoral and postdoctoral palynological research on the Quaternary deposits at Grande Pile, France. The pollen record from Grande Pile spans about 140,000 years and provides an excellent and apparently continuous record of vegetation and climate changes that has few rivals anywhere in the world in terms of length and detail of record.

Dr. Woillard died July 7, 1981 after several months of illness. Her untimely death is a great loss to the science of palynology.

Tom Ager

#### Samime Artuz (1925-1982)

Professor Samime Artuz was born in Istanbul, Turkey, in 1925. After taking her B.Sc. in geology and zoology from the University of Istanbul in 1950, she undertook her research in the field of palynology under the supervision of the late A. Ibrahim (Okay) at the same university. She made valuable contributions to the palynological studies of the Carboniferous Zonguldak Coal Basin of northwestern Turkey. After having completed her research for the Ph.D., she became a lecturer at the Geological Department of the University of Istanbul, where she lectured on coal geology and petrology for many years. She was lately the professor of palynology and mineralogy in the Faculty of Science of the University of Istanbul.

Professor Artuz was a visiting scientist to some prominent scientific establishments around the world, such as the Geology Department of Cambridge University, National Coal Board Laboratories in Sheffield, U.K., Coal Petrography Laboratory in Essen, West Germany, University of Cincinnati and Pennsylvania State University, U.S.A. She was also given the "Best Scientific Study Award" in Turkey in 1961 and "Nato-Minna-James-Heinman Stiftung Award" in U.S.A. in 1979.

The members of T.C.P. will never forget the valuable contributions made by Professor Artuz.

Volkan S. Ediger

#### Ahmet Can Ibrahim (Okay) (1900-1981)

Professor A.C. Ibrahim (Okay) was a well-known figure in the world of stratigraphic palynology.

He was born Tashkant, Turkistan in 1900. After accomplishing his primary education in Tashkant, he undertook his further studies in the Faculty of Mining of the Berlin Technical University, and then under the supervision of R. Potonié at the Geologische Landesanstalt in Berlin.

Professor Ibrahim (Okay) named 17 new genera and 67 new species in two of his publications during 1932-1933. In his study "Sporenformen des Aegirhorizonts des Ruhr-reviers", he modified the previous systems developed by Reinsch (1881), Bennie and Kidston (1886) and Potonié (1893), by adding two new form-genera: Aletes Ibrahim 1933 and Monoletes Ibrahim 1933. His original ideas of the artificial classification of fossil spores were later formally proposed by Potonie, as the "Turma" system, in 1952.

Professor Ibrahim (Okay) began his career at the University of Istanbul, where he lectured on many subjects of geological sciences. He was the head of the Department of Geology (1950-1962) and chief of the Mineralogy and Petrology Section (1962-1973). After having retired from the university in 1973, he continued his activities within the Turkish Committee for Palynology, where he was a founder member.

His absence will strongly be felt by the scientific circle, especially by T.C.P. in Turkey.

Volkan S. Ediger

#### NAPC III

As reported in previous issues of the Newsletter, AASP and the Canadian Association of Palynologists are jointly sponsoring two symposia at the North American Paleontological Convention III in Montreal, August 5-7, 1982. Abstracts of papers as well as registration information have been published in Journal of Paleontology, v. 56, Supplement to no. 2, March 1982. Following are papers in our two symposia:

Symposium 11 - "Palynology, the State-of-the-Art," convened by Jocelyne Legault: Reed Wicander, "Acritarchs, a 'Relatively' Unknown Group"

Sven Laufeld - paper on chitinozoa Lewis Stover and Graham Williams,

"Dinoflagellates: Present and Past"

William Elsik, "Fungal Palynomorphs" Sherwood Wise, "Calcareous Nannofossils:

erwood Wise, "Calcareous Nannofossils:
Stratigraphic Utility and Use With Other
Microfossil Groups"

David Jarzen, "Angiosperm Pollen: Keys to the Understanding of Cretaceous and Tertiary Flowering Plants"

Gordon Wood, "Fossil Plant Spores: Their Geological and Paleobiological Significance" Symposium 11 (continued) - "Palynology: The Latest Environmental Impact Statement," convened by Sarah Damassa:

R.W. Scott (Keynote), "Palynomorphs are Neglected Elements in Paleocommunities"

Daniel Habib, "Environments of Black Shale Formation in the Jurassic-Cretaceous North Atlantic"

Norman Frederiksen, "Differences Between Middle Eocene Plant Communities of Southern California and Those of the Atlantic and Gulf Coastal Plains"

Gilbert Brenner, "Paleoclimatic Implications of Some Lower Cretaceous Paleoequatorial Spore and Pollen Assemblages"

Merrell Miller, "The Use of Chitinozoans for Recognition of Sedimentary Environments: Concepts and Examples"

Philip Reid, "The Present is the Key to the Past (Dinoflagellates)"

Edward Davies, Jonathan Bujak, and Graham Williams, "Are Dinoflagellates Paleoenvironmentalists?"

Other papers to be given at NAPC III are also by palynologists:

Jonathan Bujak and Edward Davies, "Initial and Aquired Fluorescence of Palynomorphs"
William Cornell, "Acritarchs - ;Quien Sabe?"
Susan Duffield and Jocelyne Legault, "Gradational Morphological Series in Early Silurian Acritarchs from Anticosti Island, Quebec"
Lucy Edwards, "Quantitative Biostratigraphy: Review and Predictions"

David Goodman, "The Distribution of <u>Wetzeliella</u> and Related Dinoflagellate Genera in Space and Time" Evan Kidson, "Voice Access to Computers For

Paleontologic Data"

Kenneth Piel, "Computer Retrieval of Published Biostratigraphic Data"

Thompson Webb III, "Temporal Resolution in Holocene Pollen Data: Mapped Summaries of Vegetational Change"

Graham Williams and Edward Davies, "Cretaceous Dinoflagellates and Provincialism"

In short, palynology is very well represented indeed at NAPC III, presumably a sign of the esteem with which we are regarded by our colleagues in other branches of paleontology. Some of the papers presented at the Convention will be published in the Convention Preceedings volume(s).

#### 10TH ICC

The 10th International Congress of Carboniferous Stratigraphy and Geology will be in Madrid on September 12-17, 1983. Among the sessions scheduled are those on paleontology, paleoecology, paleogeography and paleoclimatology, and a symposium on palynology may be organized if enough interest is shown. For the First Circular and other information, write: Comité Organizador des X Congreso Internacional del Carbonífero, Instituto Geológico y Minero de España, Ríos Rosas, 23, Madrid 3, Spain.

#### OTHER SOCIETIES

The A.P.L.F. (Association des Palynologues de Langue Francaise) Symposium in Geneva September 30-October 3, 1981, organized by J. Charollais and Ch. Raynaud (Geology and Paleontology Department, University of Geneva), gathered 73 participants among whom were 47 French, 14 Swiss, and palynologists from six other European countries.

Only a few communications were related to the theme "Paleobotany and palynology". However, the great variety of the subjects treated and the importance given to discussions contributed to the success of the meeting.

Twenty communications dealt with the Quaternary and the Present, 6 with the Neogene and Paleogene and 3 with morphology and methodology.

A great moment of the Symposium was the presentation of long unpublished Quaternary sequences by M. Welten, emeritus Professor at the Botany Institute of Bern, senior of the Assembly and still one of the most active European palynologists.

The visit to the Herbarium of the Botany Conservatory of Geneva, one of the most important in Europe, and two excursions in the field, one to the south of Geneva presenting the Tertiary flysch, the other to the west of Lake Leman presenting the Würmian and late-glacial deposits, completed this Symposium quite agreeably.

During the General Assembly of the A.P.L.F., J.J. Chateauneuf was elected president, succeeding C. Caratini who resigned.

A motion was voted asking that everything should be done to promote the study of dinoflagellates, which has been little encouraged up to now in the French Universities. A dinoflagellate working group was then created, which will organize a first working session in Paris on March 10, 1982, and a summer workshop in collaboration with the Esso Company.

The next A.P.L.F. Symposium will take place in Paris, in October 1983. The theme chosen is "Palynology as a tool for correlation between the continental and the marine domains".

The American colleagues interested in the subject are most cordially invited.

J.L. de Beaulieu

#### MORE ON THE HAZARDS OF HF

In response to the short article on HF in the January issue of the <u>Newsletter</u>, Bill Cornell sent a copy of page 112 from the OSHA (Occupational Safety and Health Administration) publication <u>Pocket Guide to Chemical Hazards</u>. Here it is pointed out that the permissible exposure limit for HCN is 10 ppm, whereas for HF it is 3 ppm. The point is that HF is three times as dangerous as hydrogen cyanide, a useful thing to remember when working with HF.

#### REPORTS ON PAST MEETINGS

Several members have written that they enjoy reading reports on past non-AASP meetings that are relevant to our interests. Since I can't get to most of these meetings, I need help from you. If you are going to any of the meetings listed on p. 3 of the January 1982 Newsletter, or any other meeting that you think would be of interest to our members, please let me know. Then I can ask somebody to cover each meeting as a Newsletter reporter. Sometimes it happens that you are going to a particular meeting but don't have time to write an article about it. In that case, I would appreciate a postcard or letter from you suggesting names of people who were there who might write such an article. Thanks for your help. Write: Norman Frederiksen, 970 National Center USGS, Reston, VA 22092.

## DAVEY ET AL., 1966 - BRITISH MUSEUM APPROVES REPRINTING

The demand for copies of a reprinted "Davey, R.J., Downie, C., Sarjeant, W.A.S. and Williams, G.L., 1966. Studies on Mesozoic and Cainozoic dinoflagellate cysts" has been sufficient to convince the B.M. to reprint. Confirmation received from the B.M. contained the following details:

"...a reprint of our Geol. Supplement 3 should appear towards the end of this year. We intend to incorporate the appendix with the main copy in one cover and this will be a straight reprint of the original, faults and all. We might be able to do better with the plates this time, the collotypes in the original were barely satisfactory. The price will be a realistic one commensurate with a reasonable standard of reproduction of text and plates..."

When final details of publication date and price are available they will be published in this <a href="NewSletter">NewSletter</a>. Our thanks to all who have made this reprinting possible.

Chris Denison and Jim Fenton

#### PALYNOLOGIA

Not everybody who has ordered and paid for copies or issues of <u>Palinologia</u> has received them. This appears to be so because while the editors of the Journal have sent all copies or issues that they have received payment for, not all checks or money orders have reached <u>Palinologia</u>.

In case you have not received the issue or copy of <u>Palinologia</u> you have paid for, would you please inform us at your earliest convenience, giving details of payment (date, check or m.o., name of bank, plus, if at all possible, a photocopy of the canceled m.o. or check, both sides). I shall trace all payments, and send you your copies of <u>Palinologia</u>. But we MUST have proof of payment. Send all correspondence to: Maria del Carmen R. Díez, Apartado 543, León, Spain.

#### POSITIONS AVAILABLE

BioStratigraphics, a unit of McClelland Engineers, Inc., has a position open in San Diego for a stratigraphic palynologist. Requirements include a minimum of five years of operational palynological experience with a background in Mesozoic and Tertiary palynofloras. Interested individuals may send resumes in confidence to A.D. Warren or Hideyo Haga, BioStratigraphics, 7202 Clairemont Mesa Boulevard, San Diego, California 92111.

Gearhart Geodata has vacancies in the following positions: Senior Palynologist and Palynologist with Far East/Australasian experience. Gearhart Geodata, a subsidiary of Gearhart Industries Inc., is entering a further phase of expansion of their Stratigraphic Services division. This development will create overseas vacancies for palynologists, who preferably are graduate geologists with experience of tropical Tertiary palynofloras. These challenging career positions offer a unique chance to help establish a new stratigraphic services laboratory and share in the opportunities of its growth within a successful expanding major oil-field consultancy company. Salary and benefits package are negotiable, and will be appropriate to qualifications and experience. Send Curriculum Vitae or write for application form to: Dr. L.A. Riley, Gearhart Geodata Services Limited, Howe Moss Drive, Kirkhill Industrial Estate, Dyce, Aberdeen AB2 OGL, U.K.

#### POSITION WANTED

M.A. Tslam seeks career opportunities involving palynology or palynostratigraphy in industry or a university. Dr. Islam has a Ph.D. from the University of Sheffield with a dissertation on Eccene dinocyst palynology and palynostratigraphy and is presently a consultant on Mesozoic palynostratigraphy. Dr. Islam has previous experience in exploration with a geological survey and in university teaching, and has 8 publications and 4 papers presently submitted for publication. Please write: M.A. Islam, 2/152 Broadway, Nedlands, Western Australia 6009, Australia.

Ph.D. palynologist. Receivied M.S. in palynology from Arizona State and Ph.D. in palynology from the University of Connecticut. Experience includes teaching and research with emphasis on Mesozoic palynology. I also have a B.A. in Slavic Languages and can read Russian, Bulgarian, Macedonian and Serbo-Croatian. I am looking for a position in a research lab. I can be contacted at: Michael Zavada, Biological Sciences Group, U-43, The University of Connecticut, Storrs, Connecticut 06268.

#### FORUM

Comment, by Alfred Traverse

Bill Sarjeant on p. 6 of the current (15:1) Newsletter says, "...the problems of trying to classify dinoflagellate cysts under the existing International Code of Botanical Nomenclature, and the greater problems likely to be encountered when that Code is revised by taxonomists with little appreciation of the problems either of, planktonologists or of palynologists...." Although I have great respect for Bill's contributions to our science, I feel I must correct these statements. First, the Code has nothing (well, almost nothing) to do with how one "classifies" dinoflagellate cysts, fossil pollen, or anything else. The Code is only a rule book for the application of names, telling how names should be compared, which techniques of publication make names validly published, whether this or that name is legitimate, what is the type for a name, etc. The only way this impinges at all on classification is that an initial decision must be made--is a dinoflagellate cyst a plant remain? If it is so considered, then the rules about synonymy, priority, and all that, apply, if latinized, botanical-style binomial names are used for dinoflagellate cysts. That one decision, "Is a dino a plant?"  $\underline{is}$  a taxonomic (classificatory) question. But aside from that, the workings of the Code are strictly about the technical matters of naming and the handling and application of (correct) names. Secondly, Bill has apparently not been aware that palynologists-planktonologists are involved in the housekeeping of the ICBN. The Chairman of the Committee for Fossil Plants of IAPT, and the Secretary thereof, are both palynologists. One member of the Committee (W.R. Evitt) is a dino specialist. The Chairman of the Committee (W.G. Chaloner) is also on the small Editorial Committee of IAPT that is writing the "Sydney Code". Both the Chairman and the Secretary played significant roles in the debates which led up to the new Code. No matter what classificatory scheme may be developed for dinoflagellate cysts, the entities in that classification will have names (A-1-65?; or whatever). If latinized binomial nomenclature is used in the botanical fashion for them, the Code tells one how to do it, but the Code has only to do with the naming, not with the classifying. Furthermore, there is no obligation at all to use the botanical sort of names -- use letters, symbols, or whatever, if you like and can find others to read about it. It's only that if one does purport to use botanical-style binomial nomenclature, the Code is the accepted way to do it.

#### Reply, by W.A.S. Sarjeant

The dictionary nearest to hand is <a href="Chamber's">Chamber's</a>
Twentieth Century Dictionary. On page 195, it states: "classify, v.t., to arrange into classes"; and "classification, n., act or system of arranging in classes". Surely the <a href="International Code of Botanical Nomenclature">International Code of Botanical Nomenclature</a> is presenting us with a hierarchical system for doing just that - arranging

plants (multicellular or unicellular), their spores, their parts, their cysts, into classes, subclasses, orders, families, genera, species? Not merely does the <u>Code</u> provide rules governing names; also it presents for use a system of ordered divisions, a classification. No - sorry, Al, I can't accept that the <u>Code</u> has nothing to do with how one classifies dinoflagellate cysts and other palynomorphs. How can that be true, when the <u>Code</u> determines the whole framework by which they are arranged into groups as well as named?

And yes, I do think that the changes envisaged will be deeply disadvantageous to those palynologists who, in the future, are trying to work within the nomenclatural/classificatory constraints of the Code. I believe also that our palynological representatives on the ICBN committees did a lousy job of acquainting us other palynologists about the proposed changes, and seeking our opinions, before those changes were implemented. Would it not have been possible, Al, to have a session at the International Palynological Congress in Cambridge (of which you were President), to discuss these changes and to seek our reactions? No, we don't all have access to Taxon; nor can we find funds to go to the International Botanical Congresses at which decisions are made; nor, if we did go, would there be enough of us present to influence the decisions made there. So we rely on you, our representatives; and if you don't choose to tell us what's going on, we don't know and can't respond, can we?

Yet the deletion of organ genera and species from the <u>Code</u>, and the threatened deletion of the form genus - has it happened by now? - will have taken from the <u>Code</u> two of its greatest assets. These were the features that made the botanical <u>Code</u> so much more flexible, so much more suited to the difficult problems faced by palynologists, than that inflexible zoological <u>Code</u> which causes so many problems to palaeontologists.

I haven't yet had the opportunity to examine the "Sydney Code" but, if the concepts of organ and form genera and species have indeed been discarded, then I'm afraid I must stay with my original statement; that such revisions can only have been made by taxonomists "with little appreciation of the problems of planktologists or palynologists". If those taxonomists happen to be palynologists themselves, then their insensitivity to the opinions and requirements of their colleagues is yet more saddening.

#### BOOK REVIEWS

Rosler, O. and T. Fairchild (Editors). 1980.

Paleobotânica e Áreas Afins na América do Sul.

Contribuições a II Reunião de Paleobotânicos a

Palinólogos, São Paulo, 6-8 Dezembro, 1979. Boletim

IG- Instituto de Geociências da Universidade de São

Paulo 11: 31-189.

This volume contains 19 of the 27 papers presented at the symposium, "Paleobotany and Related Areas in South America" at the second meeting for paleobotany and palynology in São Paulo, Brazil. Presentations dealing with modern pollen morphology

were printed separately in Hoenia, and those resulting from the working group of the Subcommission for Carboniferous Stratigraphy of the IUGS on continental Gondwana deposits of South America are published in Paleobotanica Latinoamericana (circular of the Asoc. Latinoamer. Paleobot. Palynol.) 1(3): 23-35, 1979. The papers are arranged according to age of material treated, and include late Precambrian (2 papers), "Neopaleozoic" (basal Carboniferous through Permian: 12 papers), Cretaceous (2 papers), lower Tertiary (1 paper), Plio-Pleistocene (1 paper), and Pleistocenepost-glacial (1 paper). Languages are English (1 paper), Spanish (3 papers) and the Brazilian version of Portuguese (15 papers); eleven of the non-English language papers have brief English abstracts.

The first two papers by Thomas Fairchild et al., and Walter Scholl and C. Fogaca treat late Precambrian stromatolites from the Bambuí and Macaúbas Groups (São Francisco Supergroup) of Brazil. Fairchild et al. describe and illustrate three types of algal microfossils, unnamed, consisting of narrow, tubular to septate filaments; clustered, small-celled colonies; and possibly some larger unicells.

Bernardes de Oliveira and Rósler describe stem impressions of lycopods from the Arrayan Formation of Chile, and speculate on a possible late Devonian to early Carboniferous age based on the generically unidentified material. Azcuy and Césari report Asterotheca piatnitzkyi Frenguelli and associated pecopterids and Cordaitales from coal shales of the Libertad Formation (ca. late Carboniferous) of La Rioja Province, Argentina.

Three papers in the volume provide a revised phytostratigraphy of the late Paleozoic (lower Permian) Itarare (Sakmarian age) Group, Rio Grande do Sul, Brazil. Megafossil genera reported are Gangamopteris, Samaropsis, Cordaites, Botrychiopsis, Chiropteris, Koretrophyllites, Rubidgea, Paracalamites, Buriadia, Glossopteris, Gangamopteris, Cordaicarpus, and unidentified reproductive structures and algal remains. Palynomorphs include Punctatisporites, Granulatisporites, Calamospora, Leiotriletes, Cristatisporites, Potonieisporites, and Plicatipollenites.

M. Arai and O. Rösler describe miospores of Portalites, Vittatina, Protohaploxypinus, Striomonosaccites, Florinites, Apiculatisporites, Raistrickia, Leiotriletes, Calamospora, and Punctatisporites from the Rio Bonito Formation, Tubarão Group, Paraná Basin of Brazil. They interpret the assemblage to reflect an early to middle Artinskian (Permian) age. Millan records a new occurrence of Brasilodendron pedroanum (Carruthers) Chaloner, Leistikow and Hill, 1979 in the Tubarão Group (late Carboniferous) of São Paulo, Brazil, and Bernardes de Oliveira describes a new genus and species (Ponsotheca roesleri) from the Rio Bonito Formation (Permian), state of São Paulo, Brazil. Four other papers deal with additional facets of Permian palynology in Argentina and Brazil.

Mesozoic palynomorphs are listed (without illustrations) by Lima and Almeida Campos from the basal Cretaceous (Buracica Stage) Muzinho Shales of northeastern Brazil. The most common genera are Matonisporites, Inaperturopollenites, Araucariacites, Vitreisporites, Classopollis, Circulina, Dicheiropollis, Eucommidites, Penetetrapites and Exesipollenites. An extensive Aptian-age pollen and spore assemblage is listed by Lima et al. from the state of Pará, Brazil.

Cenozoic studies are represented by three palynological papers in the volume. Palma-Heldt describes a lower Tertiary microflora from the Arauco-Concepcion area of Chile and records Cyathidites, Trisaccites, Podocarpidites, Proteacidites, Psilatricolporites and Polyporina. The two final papers are concerned with Plio-Pleistocene sediments (Tilatá Formation) in the Sabana de Bogotá region of Colombia, and Quaternary peats from the Águas Claras region of Brazil.

The symposium volume is well-edited, and individual papers contain illustrations of adequate quality and relevant bibliographic references. There has been a steady increase in the number of paleobotanical/paleopalynological papers from South America (presently numbering over 1400), as well as significant improvement in the quality and technical production of symposium volumes. This collection of papers provides a good current sampling of such research in South America.

There is no indication of how to obtain the symposium volume or its cost. This information can likely be obtained from Dr. Oscar Rösler, Instituto de Geociências, Universidade de São Paulo, Cx. Postal 20.899, Cep. 01.000, São Paulo, SP Brasil.

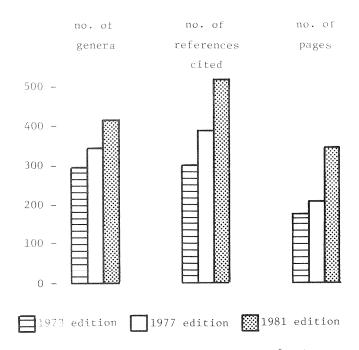
Alan Graham

Fossil Dinoflagellates: Index to Genera and Species, 1981 Edition, by J.K. Lentin and G.L. Williams; Bedford Institute of Oceanography Report Series/BI-R-81-12, 345 p.

This is Judi Lentin and Graham Williams' latest updated dinoflagellate index. No self-respecting dino worker can exist without it. It contains references known to the authors as of April 1, 1981. Their first index appeared in 1973; their second in 1977. This is the third.

Four years seems to be about right for updating. The number of included species has increased from 1328 in 1973, to 1700 in 1977, to 2210 in the present version. Number of genera, number of references cited, and number of pages required to express it all, have increased in a similar fashion (see figure). The 1981 edition incorporates the major taxonomic changes made by Stover and Evitt in 1978, over 120 other new references, and now includes species of calcareous dinoflagellate fossils.

Due largely to the efforts of Lentin and Williams, dinoflagellate taxonomy has achieved a degree of orderliness that workers in other fossils groups should strive to attain. Using their index,



one can quickly find the present status of a taxon if one knows any previous generic assignment and the associated trivial name. One can usually trace the entire taxonomic history of the given species, although this task may involve some thumbing back and forth through the index. The cross-referencing is a major asset.

The 1981 edition contains 117 new combinations, 12 new names for junior synonyms, and 9 changes in rank. These taxonomic changes are about evenly distributed between what I call "housekeeping chores," and subjective re-evaluations by the authors. "Housekeeping" involves recognizing junior synonyms when two publications appeared nearly simultaneously, transferring species from one genus to another when the original genus has recently been re-evaluated or circumscribed, and transferring species to the appropriate newly created genus.

The index contains considerable historical insight and detail (one example is the history and resolution of the <a href="Kalyptea/Komewuia">Kalyptea/Komewuia</a> synonymy). The index is much more than a simple compilation of the taxonomic paths of the published dinoflagellate species. Lentin and William use their insight and value judgments to accept or reject previous taxonomic decisions on nearly every page.

A work as complete as the 1981 edition would be nearly impossible without the foundation laid by the previous editions. In addition, the authors have called upon their readers to catch as many mistakes as possible. Much correspondence with fellow workers has resulted in the correction of errors from the previous editions. Lentin and Williams also used the AASP Newsletter as a forum to request readers to catch any oversights in included literature. The response seems to have been quite good. Over 50 references were added to the list they had already compiled. The result is a remarkable work, remarkable for its completeness and I did notice 3 typographical lack of errors. errors (in 345 pages) and found one reference they did not cite -- not a bad track record at all!

The only criticism I have, is that I cannot always trace the entire taxonomic history for a few taxa. For example, I can tell that Florentinia ferox (Deflandro, 1937) Duxbury, 1980 was originally Hystrichosphaeridium and was put into Baltisphaeridium by Downie and Sarjeant, into Hystrichokolpoma by Davey and into Silicisphaera by Davey and Verdier. Florentinia clavigera passed through the genera Hystrichosphaeridium, Baltisphaeridium, Hystrichosphaera, and Hystrichokolpoma, but I had to look elsewhere to find who put it where and when. A more complete use of citation of transferring authors and former assignments would be appreciated. (I seem to notice a trend in this: the more recent changes have a complete history, and are cross-referenced quite completely.)

This invaluable resource is available by request from the authors. At the AASP meeting in New Orleans, Judi Lentin suggested that response would be quicker (and she would save on the postage) if requests are made to Graham Williams at the Geological Survey of Canada, Dartmouth.

Lucy Edwards

#### A Bibliography of Chinese Palaeobotany

The Institute of Geology and Palaeontology, Academia Sinica, Nanjing has just published (1981) a Bibliography of Chinese Palaeobotany, compiled by Professor Li Xingxue (H.H. Lee). It comprises both an English version and a Chinese version, bound as a single volume, and listing some 750 references. For those who think of the written Chinese language as cumbersome, it is interesting to note that while the English version occupies 80 pages, the Chinese section takes only 59! The English text gives all references in their original form, except for Chinese and Japanese papers where the title is translated into English.

The scope of the work includes palynology as well as papers dealing with macrofossil plants, and covers all references known to the compiler up to 1980. All foreign language papers dealing with Chinese material are also included. The bibliography extends back in time to the work of Shen Kuo (1029-1093 AD) who cited occurrence of what is now believed to be fossil Neocalamites which he interpreted as fossil bamboos.

For those still wrestling with the modernisation of the Chinese names of authors, it is particularly helpful that the "old" (Wade-Giles) versions of names are given with cross reference to the "new" (Pin-jin) version. For example, the familiar Hsu Jen now becomes Xu Ren.

The only possible regret for a reader outside China is that the bibliography is a lead only into published work. I hope that in the future, we may also see some report on work in progress to supplement what has already appeared. This, coupled with addresses through which correspondence can be effected, is a valuable aid to exchanging thoughts (and material) while the research is being carried out. Palaeobotanically speaking, there is indeed

much going on in China. On a recent visit I was ashamed to realise that while the Chinese workers follow closely work which is published elsewhere, the western world is still relatively unaware of palaeobotanical work conducted in China. This admirable compilation by Li will help to restore the balance.

Copies of this bibliography can be obtained on request at a price of US \$6.00 (inclusive of surface mail postage and packing) from Mr Ma Zhen-gang, Librarian of Nanjing Institute of Geology and Palaeontology, Academia Sinica, Chi-Ming-Ssu, Nanjing, People's Republic of China. International Money Orders, payable in US \$ should be made out to Account no. 94171033, Bank of China, Nanjing Branch, Nanjing, PRC.

W.G. Chaloner (Reprinted from <u>International Organization of</u> Palaeobotany Newsletter 16)

#### Phanerozoic Stromatolites, C. Monty (ed.)

Paul Strother reviewed this book in the January 1982 Newsletter. Ever-alert Judi Lentin pointed out that we forgot to include the publisher's address, which is: Springer-Verlag, 175 Fifth Ave., New York NY 10010.

#### ADDRESS CHANGES

Several members have inquired why the <a href="Newsletter">Newsletter</a> doesn't print address changes any more. There are so many of them now, with our membership grown so large, that the AASP Editorial Staff decided not to print them any more. Sorry, you'll have to wait for the next issue of the <a href="Membership Directory">Membership Directory</a>. By the way, if people ask you for a membership application form, please give them the new kind - on the cover of the January 1982 and succeeding issues of the <a href="Newsletter">Newsletter</a>. This format is designed to ease the formidable burden on Evan Kidson, who keeps track of addresses.

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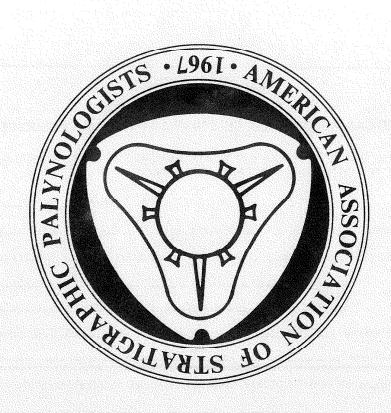
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