



IOP NEWSLETTER 68

MARCH 2000

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The views expressed in the newsletter are those of its
correspondents and do not necessarily reflect the
policy of IOP.

President: J. Galtier (*France*)
Vice Presidents: J. Anderson (*S. Africa*) - A. Herman (*Russia*) - K. Uemura (*Japan*)
Secretary: Prof. M. C. Boulter
University of East London - Romford Road - London E15 4LZ - England

EDITORIAL

This organisation was founded in 1954 during the Paris Botanical Congress. Edouard Boureau, who died in October last year (see the obituary on page 5) was the principal originator, and started the thing going as the first secretary and editor of the *World Report on Palaeobotany*. Bill Chaloner took over as secretary until the 1975 Leningrad Congress. There, it was decided that IOP should replace the *World Report* with a newsletter, much in the style of other such informal publications that many learned bodies were starting to produce at that time. So the new secretary, Hans Tralau produced the first two IOP Newsletters in 1976. He died at an early age in March of the following year.

Newsletter production was maintained by the ebullient President, James M. Schopf who produced newsletter 3 the month after Hans died. It contained a new constitution and many reports of meetings and opinions from around the world. My favourite headline was the trumpet call at the end, on page 4: "THE PRESIDENT SPEAKS". When Jim spoke, he shouted, and you listened. When Jim wrote, the ground shook, you sat up and took notice. I know because as the new Secretary, then, I received a barrage of long letters from him, posted weekly, with instructions and ideas and praise and criticism. We had fierce arguments and often he told me not to include particular pieces. Of course, I did include them, and he laughed. When he too died, in 1978, an era in palaeobotany, let alone the international organisation, seemed to have come to an end.

There was enough copy trickling into our London office to produce three newsletters a year. A core of regular contributors quickly developed, just as many parts of the international community became conspicuous by their silence. But we kept the show on the road. I remember feeling at the time that I'd far rather edit a newsletter read by hundreds than a paper about fossil plants read by two and a half (me, my student, and the half was the referee).

Another development in those distant years was the initiation of our series of IOP Conferences every four years. The first was inspired by Bill Chaloner around the time of Tom Harris's retirement, in Reading in 1980. This year the sixth IOPC is in China: at last, after three invitations. The long ballot listed below suggests a lively election which must be another sure sign that IOP is alive and well.

That's more than I've been fearing for the last couple of years while the amount of material sent for the newsletters has been falling quite considerably. I

hope it's because of the internet making old fashioned newsletters unnecessary. I fear it's because young scientists are too busy with bureaucracy in a closed world. Whatever, it's well past time for a change in direction again and a new secretary.

So, this is my last newsletter. I have loved the work, loved being within you all, and flattered by your praise. I thank you for reading, and those of you who have contributed. Helen Fisher has helped a lot over the last few years and I thank her especially. But we are all privileged to be part of such an exciting movement of knowledge at such a crucial time in the changing life on our planet. I'm sure the next IOP secretary will help face that set of problems.

M.C. BOULTER, London

IOP NEWS

ELECTIONS TO THE EXECUTIVE COMMITTEE

The following IOP members have been nominated to stand as candidates in the election this summer at the IOP Conference in China. All of them have agreed to accept their nomination.

President:

E.M. Friis, Stockholm, Sweden

E. Taylor, Kansas, USA

Vice-Presidents (3):

M. Fairon-Demaret, Liege, Belgium

V. Krassilov, Moscow, Russia

Z. Kvacek, Prague, Czech

Ge Sun, Nanjing, China

Secretary:

P. Gerrienne, Liege, Belgium

R. Hill, Adelaide, Australia

M. Popa, Bucharest, Romania

G. Rothwell, Ohio, USA

Members-at-Large (3):

M. Collinson, Egham, UK

A. Drinnen, Melbourne, Australia

D. Greenwood, Melbourne, Australia

H. Kerp, Muenster, Germany

Li Chen-Seng, Beijing, China

Liu Lujun, Nanjing, China

S. Manchester, Florida, USA

H. Nishida, Tokyo, Japan

F. Thevenard, Lyon, France

B. Tiffney, California, USA

V. Wilde, Frankfurt, Germany

The IOP Constitution is published in newsletter 34 (December 1987) and on our website (www.biodiversity.org.uk)

Article 7.6 describes the ballot process. "Any member who wishes to vote by mail may send their ballot to the Secretary, to be received before the time of the meeting of the General Assembly at the Congress. Each ballot paper should be enclosed in a sealed envelope with the voter's name clearly written on the reverse side of the envelope. Members who plan to attend the Congress may prefer to vote in person at the General Assembly."

THE IOP ARCHIVE

This is being curated at the National Museum of Wales, Cardiff. It contains four filing cabinet drawers of papers, spare newsletters 4 - 68, occasional IOP publications (such as Meyen, 1990), correspondence and other papers. The letters from Jim Schopf mentioned above are included. The last of these have some historical importance for fossil plant nomenclaturists, being written a few days before the publication of the 1978 Code, which Schopf edited, and which was published hours before he died.

THE IOP WEB SITE

Few know of developments since our infamous IOP Plant Fossil Record Frankfurt Declaration back in 1991. Look at that database and the remote links and interactive analysis possible at our Java enabled web site: www.biodiversity.org.uk

FORTHCOMING MEETINGS

FIRST CIRCULAR ANNOUNCING: THE TENTH BRAZILIAN MEETING OF PALEOBOTANISTS AND PALYNOL-OGISTS (X REUNIÃO DE PALEO-BOTÂNICOS E PALINÓLOGOS), 11-16 December 2000. Universidade Guarulhos, Guarulhos, Sao Paulo, Brazil.

The tenth Brazilian Meeting of Paleobotanists and Palynologists (X Reunião de Paleobotânicos e Palinólogos - X RPP) will be held December 11-16, 2000, at the Guarulhos University in the Greater São Paulo metropolitan area.

As in all previous meetings in this series, this year's program offers a broad spectrum of activities, divided approximately equally between technical sessions (oral and poster presentations), and special

events, including keynote addresses and round-table discussions on: "Phytostratigraphy of the *Glossopteris* flora"; "Phytogeographic patterns: Paleoenvironmental implications of present and past distributions of plants"; "Palynostratigraphy of Mesozoic sequences applied to petroliferous systems: Methods of high-resolution study and perspectives"; "Palynostratigraphic correlations of the Late Paleozoic of Gondwana".

We enthusiastically invite all interested persons to attend. The Registration Fee is US\$ 70, payable by check to Antonio Roberto Saad.

Abstracts for oral presentations (15 minutes plus 5 minutes for discussion) and posters should be mailed by 30 June 2000 in hard form and 3 1/2 diskette (WORD 97 or 98 format using Times New Roman 12 font and 1.5 spacing). All text, title, author's names and affiliations, etc, should fit within a single A4 page (210 x 297mm) with 3.5 cm upper margin, 2.0 cm right margin, 3.0 cm left margin, and 2.5 cm lower margin.

Information on accommodation and how to get to the meeting will be available in mid-March by e-mail and in the Second Circular to be sent out in July. Contact: Prof Dr Maria Judite Garcia (President, Organizing Committee) Universidade Guarulhos, Laboratório de Geociências Praça Tereza Cristina, 01 - Guarulhos, SP, Brazil - 07023-070 Telephone: 55 (11) 6464-1708 e-mail: geo@ung.br

THIRD INTERNATIONAL SYMPOSIUM ON EXTANT AND FOSSIL CHAROPHYTES, Nanjing, P. R. China, October 16 - 20, 2000

The Symposium is open to any aspect of Charophyte Research. The scientific sessions will be followed by a 2 1/2 day field trip in Jiangsu Province (around Nanjing).

Contact: Prof. LU Huinan (organizer)
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NANJING, 210008, P. R. China
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Fax: -33 - 4 67 14 30 31
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QUILLWORT CONFERENCE 2000: THE ECOLOGY AND EVOLUTION OF ISOËTES

We are finalizing plans for *Quillwort Conference 2000: The Ecology and Evolution of Isoetes in the New Millennium*. The conference will be held on the beautiful campus of South Georgia College in Douglas, Georgia, 8-11 March 2000. This area is an *Isoetes* hot spot. You will see diploids, tetraploids and even hexaploids on the two eye-popping field trips following the paper sessions. Total cost including registration, food, dormitory style lodging, mixer, banquet, and a foray to the spectacular Broxton Rocks is just \$99.95! You read it right—all this for less than \$100 for three enriching days. There will be a modest additional charge for the Saturday all day field trip to the fabled Georgia granite outcrops. All this and more in the company of ardent quillwort workers. Can it get any better?

Yes, it can! Several exciting paper sessions are planned. In addition, a unique feature of the conference will be a hands-on quillwort workshop where participants can learn and exchange information about making chromosome counts, preserving and preparing specimens for research, assessing morphological characters, and much, much more.

We invite you to attend this meeting and join in the camaraderie. If you wish you to contribute a 15 minute oral presentation on your work with *Isoetes*, please send the title of your talk by 1 January 2000 to: Carl Taylor, Milwaukee Public Museum, 800 W. Wells St., Milwaukee, WI 53233.

To register for the conference, complete the following registration form with a check for \$99.95 made payable to: "Quillwort Conference 2000" and send to: Lytton Musselman, Department of Biological Sciences, Old Dominion University, Norfolk, VA 23529. Please register by 1 February 2000.

NEWS OF A RECENT MEETING

ARBEITSKREIS FUER PALAEOBOTANIK UND PALYNOLOGIE, 12th-15th May 1999

The fine summer days of 1999 are long gone but not yet forgotten. After all, who could forget the last APP meeting of the millenium in the heart of beautiful Swabia?

The 27th annual meeting of the German-speaking Arbeitskreis für Palaeobotanik und Palynologie was convened in the charming university town of Tuebingen in mid-May of last year. Roughly 80 participants from all corners of Germany, from neighboring countries (Austria, France, Holland, Switzerland) as well as from overseas (Mexico, U.S.A.) came together at the University of Tuebingen for the three-day conference.

This APP meeting, one of the best attended in the recent past, consisted of two action-packed days of lectures and a day-long field trip. The first talk to open the sessions was given by invited speaker Karl Niklas on his biomechanical perspective on the evolution of the early vascular plants. Niklas' lecture set a high standard in terms of research and presentation which was indeed met by the talks to follow, making this a most stimulating scientific gathering.

The oral presentations, 44 in all, were loosely organized into various paleobotanical topics, such as the morphology of terrestrial plants, new methodology, terrestrial ecosystems in the Paleozoic and Mesozoic, palynology, and phytoplankton. The largest block of lectures, however, representing over one-third of the total, was on the vegetation and climate in the Tertiary and Quaternary.

The very last session which was, unfortunately, sparsely attended, turned out to be one of the most interesting, in my opinion. In a small, relaxed circle of spectators, new data banks that have been developed on various aspects of paleobotanical and palynological information were demonstrated using portable computers and associated equipment that projected the image from the computer screen for all to see. Johanna Kovar-Eder showed us how to use the internet to find any catalogued specimen using the Internet in the palaeobotanical collections in Austria, while Torsten Utescher introduced his "Palaeoflora" data bank on Cenozoic plant taxa (with an emphasis on palaeoclimate and palaeoecology), and Thomas Bode on his multi-media data bank on the Paleogene pollen and spores of central Europe.

Complementing the depth and breadth of the oral presentations were the 23 posters on various aspects of paleobotany and palynology. Poster topics ranged, for example, from Early Devonian land plants & their ecophysiological parameters (W. Konrad & A. Roth-Nebelsick) to Recent lianescent social climbers (T. Speck & N.P. Rowe), from nail polish as a new mounting medium for palynological slides (C. Heunisch) to frozen human mummies & their Pleistocene plants (S. Bortenschlager).

What I have come to greatly appreciate about the APP meetings is not only the interesting and varied topics presented, but also that they truly provide the opportunity to interact on a personal level with colleagues and friends seen perhaps only once a year. Before the sessions ever began, many of us were able to exchange our first greetings over beer and potato dumplings (what else in southern Germany?) at a local beer garden (never mind that it was raining).

On the following days, we enjoyed a scrumptious evening buffet at the Renaissance castle located on a pinnacle in the old town, informal lunches in a nearby botanical garden, and a tour through the palaeontological museum at the university. Indeed, our hosts in Tuebingen (Volker Mosbrugger and colleagues) provided a well-organized program with the perfect balance of formal and informal events, a framework in which information on a professional and personal level could be exchanged.

The field trip capitalised on the lovely sunny weather that appeared at the conclusion of the conference, taking us among the jagged, white Jurassic escarpments, green rolling hills, lush meadows and forests outside of Tuebingen. Like the meeting, the trip program was paleontologically diverse; we stopped at sites featuring Liassic ammonites (the famous Arietenspflaster which, unfortunately, was under a meter or so of rushing floodwater at the time), Upper Jurassic gymnosperms (Nusplinger Plattenkalk), middle Miocene angiosperms (Schrotzburg), and Holocene travertine with encrusted plant bits. I thought that the highlight of the excursion was, however, the stop at the Dotternhausen quarry where we split open the black Posidonia Shales to reveal slabs of golden ammonites, heard an interesting discourse on Lower Jurassic marine palaeoecology, and dashed through the attractive new palaeontological museum there.

The next APP meeting will be held in conjunction with the German Palaeontological Association in Coburg (northernmost Bavaria, just south of Thuringia), from 24th - 30th September 2000. Of special paleobotanical interest is the excursion to the Triassic of Franconia featuring the local Keuper flora.

C. GEE & M SANDER. Bonn, Germany

OBITUARIES

PROFESSOR EDOUARD BOUREAU, 1913 - 1999

Professor Edouard Boureau died on 2nd October 1999. The following are personal thoughts in tribute to a man that I regard myself as being very privileged to have been one of his pupils.

I immediately remember his words « Bonjour, now you are here like at home » when he welcomed me in his office in september 1967. As a student I was rather surprised, such words from a French Professor of University were so rare at this time but I became very quickly convinced of the reality of this very warm welcome. Professor Boureau was sincere, efficient and captivating. All the young scientists who constituted his research team had been fascinated by the inspired and enthusiastic teacher of Botany and Plant Evolution. His lectures were so exciting that some of us re-attended the theatrer to hear again the lecture the following year. Professor Boureau demonstrated all his life the same enthusiasm in research that he was expecting from any young scientist.

He was born in 1913 and obtained his Doctorate in 1938 (at 25). After the World War, in 1946, he got a position at the CNRS and became Director of the laboratory of « Anatomie comparée des végétaux vivants et fossiles » at the Muséum National d'Histoire Naturelle, Paris.

After his nomination as Professor at the Faculté des Sciences de Paris in 1960, he created the Laboratoire de Botanique-Paléobotanique of the Faculté des Sciences, now Université P. et M. Curie.

He quickly developed a strong research team of about ten scientists and lecturers at the University and created the D.E.A. Paléobotanique, the only one of its kind that has ever existed in France. At this time he also developed many eminent international collaborations necessary to undertake his great task: the *Traité de Paléobotanique*. Several remarkable volumes have been published with a great success. However the series remained incomplete due to financial and extra-scientific reasons.

The international audience of Professor Boureau was established very early. In 1954, on the occasion of the Paris International Botanical Congress, he was one of the founder members of the International Organization of Palaeobotany and he became the first Secretary General. In this function, he took charge of editing and international distribution of the famous *World Report on Palaeobotany*.

His scientific contribution was recognized and resulted in his election to the Académie des Sciences de Paris in 1978.

Several pages would be necessary to describe the numerous research themes that he developed and often renovated: Palaeoxylology, Evolutionary Systematics, Phylogeny, Phytodermology, Palaeoecology, etc... Finally he published more than 300 papers. Among all his discoveries, I wish to select one example which appeared very innovative at the end of the seventies. At this time he developed studies of silicified microorganisms from the Cambrian cherts of Gherb el Richât collected by his friend Théodore Monod. From this fossil material he was able to demonstrate the crucial significance of symbiosis in the evolution of living organisms and to re-introduce the theory of the endosymbiotic origin of the eukaryote cell. Indeed his audacious model of an « Ecophylogeny of the first organisms » provoked several scientific controversies: these were very stimulating and conform to his « young scientist's » enthusiasm. Twenty years later, and following the results of the research in molecular biology, it is this theory which is now generally adopted!...

J. BROUTIN, Paris, France

VLASTA VODICKOVÁ-KNEBLOVÁ, 1919- 1999

Atka Vodicková died on November 24, 1999 in Prague. She was an outstanding Quaternary Czech palaeobotanist, educated as a botanist, and a scientific worker at the Quaternary Department of the Czech Geological Survey, and an active scientist in garden and rock botany till her last days. She will be best remembered for her perfect drawing illustrations of botanical books such as for example Prof. J. Dostál's *Key to Flora of the Czechoslovakia* (first edition 1950, 2269 pp.) or her drawings of grasses and protected plants from the last years. All of her drawings and water-coloured pictures are deeply professional, and which is highly valued, sketched after a living plants. She was also the only Czech scientist introduced in the Catalogue of the 3-rd International Exhibition of Botanical Art & Illustration, compiled by Karen A. Korach in 1972 (Pittsburgh, Pennsylvania).

Dr. Vodicková was educated in Quaternary palaeobotany at the "Polish school," in Krakow, Poland, by the Prof. W. Szafer, a personal friend of the Czech Prof. F. Nimejc. In the rich collections of the Palaeobotany Department of the Botanical Institute, she had the opportunity to study Quaternary seeds, fruits and pollen/spores, which

became her primary interest in the field of geology. This was a very fruitful time; not only for the scientific specialisation but also for the beginning of many friendship relations with the Polish palaeobotanists that lasted till the end of her life. The stay in Poland also widened her theoretical knowledge of Quaternary geology and botany by numerous excursions and trips across Poland, which she made with her husband, geologist Dr. J. Vodička CSc. They visited many localities and protected natural areas, among others the famous Belovez Forest, the only habitat of bison in Europe. For Atka such excursions were practical lectures in both Quaternary geology and nature conservation, and motivated her interest in natural sciences.

Her first palaeobotanical contribution was focused on taxonomic study of plant imprints in travertines in Slovakia. Her later studies concentrated on seeds, fruits and pollen spectra of bogs and other organic deposits. She discovered and described the first glacial microflora in Ostrava area and many other quaternary associations of bogs and moors (in Beskyd Mts. in northern Moravia, in the Železný hory Mts. and elsewhere). Some results of her research were supported by C^{14} dating. In the years 1968 and 1969, she worked on several Pleistocene profiles in the valley of Neckar in western Germany.

This was her first trip to stay abroad with the exception of Poland. The following years were filled with research in the Quaternary of the Czech Republic, especially for the purpose of geological mapping. She published several tens of contributions in palaeobotany and became a respected scientist in the Quaternary. She was also still active as the illustrator (pictures in the book of P. Sláuf: "Rock garden plants of New Zealand", 1980) and the author of a well known book "Rock garden plants" (1984), translated into five languages.

After her retirement from palaeobotany, she started with great enthusiasm activities in her own garden and in practical botany on a professional level. With the other authors, she participated in the thick volumes of the *Garden Lexicon*, wrote a text for the book on rockery flowers and illustrated the book "Alien expansive weeds of Czechoslovakia" (1991, Academia Publishing House).

Dr. Vodicková was a happy human being for whom professional interests were also a personal hobby. Along with her husband, she turned their weekend house, formerly surrounded only by thickets and stones, into a huge garden with two thousand species of flowers, shrubs and trees. It became a

small plant reservation and the site of many excursions of university students and academic visitors, often from abroad.

It was probably the trips and holidays in the country, enthusiasm for gardening and scientific work that kept her very young and lively. She looked as though she was in her sixties till the last days. Then I was reminded of one funny event: when she was sixty, I congratulated her on her birthday as her fiftieth, because her appearance did not change with her age. She accepted my congratulation with good humour.

M. KONZALOVÁ, Prague

IOP STATUTES AND BY-LAWS

This December 1987 version supersedes all previous versions.

Article 1. NAME

The name of the organisation is INTERNATIONAL ORGANISATION OF PALAEOBOTANY (IOP).

Article 2. AFFILIATION

The IOP shall be affiliated to the International Union of the Biological Sciences.

Article 3. AIM

The aim of IOP is to promote international co-operation in the study of palaeobotany including palaeo-palynology. This includes:

- 3.1 Publication of an informative newsletter that will announce all palaeobotanical meetings, report on their proceedings, describe regional bibliographies and how to obtain them, as well as other pertinent information of wide interest. Some articles of topical interest will also be included from time to time. These will not be refereed and will not have any formal status, either nomenclaturally or as a formal publication.
- 3.2 Collaboration with officers responsible for programmes of International Botanical Congresses to ensure the inclusion therein of items of palaeobotanical interest. To organise and sponsor other conferences from time to time at the discretion of the Executive Committee.
- 3.3 The encouragement of the work of regional groups of palaeobotanists and of groups of specialists within the broader field of palaeobotany.
- 3.4 Co-operation with other international organisations have interest allied to palaeobotany, such as the International Palaeontological Association, the International Association for Plant Taxonomy, the Commission Internationale de Microflore du Paléozoïque and the International Federation of Palynological Societies.
- 3.5 Any other activities considered appropriate by the Executive Committee for warranted by interest shown by the membership. When financial support is available, publications such as a world bibliography of palaeobotany and palaeopalynology should be encouraged.

Article 4. OFFICERS

The officers of IOP form the Executive Committee

- 4.1 The officers of IOP shall be: President; three Vice-Presidents; Secretary; three Members at Large; Conference/Congress Member.
- 4.2.1 The President shall chair meetings of the Executive Committee and the General Assembly.
- 4.2.2 If the Office of President becomes vacant, one of the Vice-Presidents shall be elected by the Executive Committee to succeed to the office for the remainder of the term.
- 4.3.1 The Secretary is the driving force behind the Organisation. He/she shall transmit suggestions from the membership to the President and Executive Committee, maintain contact with

regional and local groups of palaeobotanists, maintain contact with IUBS by the assistance of one of the Vice Presidents, control the income and expenditure of IOP, transmit decision of the Executive Committee and President to the membership. The newsletter shall be the secretary's chief medium of communication.

4.3.2 The Secretary may be re-elected.

4.4 The Conference/Congress Member is chosen by the Executive Committee. He/she shall be responsible for the co-ordinating with the appropriate authorities concerning the palaeobotanical programme at the next IOP conference or International Botanical Congress. He/she shall normally be a resident of the country in which that conference or congress is to be held.

4.5 One of the three Vice Presidents is selected by the Executive Committee to take special responsibility for the Committee with IUBS affairs. He/she will instigate creative projects, in consultation with the Executive Committee, which will be part of the activities of IUBS relevant to the aims of the IOP.

4.6 The three Members at Large must be from different countries; they may not serve more than two consecutive terms of office.

4.7 One term of office is from the end of one International Botanical Congress (or its equivalent as defined by the Executive Committee) to the end of the next.

4.8 If any office other than that of President becomes vacant, the Executive Committee is empowered to select a replacement.

Article 5. REGIONS, INDEPENDENT REGIONS AND REGIONAL REPRESENTATIVES

- 5.1 To help produce the newsletter, the Secretary is empowered to select, invite, and appoint as many and as diverse Regional Representatives and Correspondents as are required to ensure effective coverage of world palaeobotany. The Correspondents may include the persons who are responsible for such regional or topical newsletters or bibliographies as currently exist or that are initiated in the future. Regional representatives and Correspondents will serve at the pleasure of the Secretary, and their appointment is open to review on a regular basis.
- 5.2 The role of each Regional Representative is to:
 - 5.2.1 Maintain a full list of names and addresses of members in that region, and to transmit these to the Secretary each year.
 - 5.2.2 Collect membership dues from each member, and after deduction of postal and duplication expenses, to transfer the surplus to the Secretary (except for Representatives of Independent Regions - see Article 5.3 below).
 - 5.2.3 Stimulate contributions to the newsletter from members in the region. Contributions should include announcements and reports of national meetings, news of individuals and their projects, obituaries, and articles of general interest. Books for review should be solicited from publishers in the region and their reviewers appointed in consultation with the Secretary.
 - 5.2.4 Receive one master copy (or several copies, if the regional membership is small or if difficult) of each IOP newsletter from the Secretary, and arrange for duplication and distribution to members in the region.
- 5.3 Some regions have difficulties in exchanging currency internationally. For the purposes of this constitution, such regions are called "Independent Regions". These are determined by the Executive Committee and named in the By-Laws. Their Regional Representatives are not required to send surplus funds to the Secretary.

Article 6. MEMBERSHIP

- 6.1.1 Any palaeobotanist who subscribes to the aims of IOP is eligible for membership.
- 6.2 The Secretary shall maintain a roll of members' names and institutional addresses. This will comprise information received from all Regional Representatives, including those of Independent Regions. It will be revised at least once a year. It will serve as an electoral roll for the election of officers to the Executive Committee, as well as a useful world list of palaeobotanists.
- 6.3 Membership takes effect immediately upon receipt of membership dues by the appropriate Regional Representative, except for Independent Regions where membership takes effect upon registration of the names and addresses by the Regional Representative with the Secretary.
- 6.4 Membership gives voting rights, the privilege of holding office, and one copy of each newsletter.

- 6.5 Institutions such as libraries and publishers may receive the newsletter by paying the annual dues set out in the By-Laws. They may not vote at elections or nominate candidates for election to office, and shall not be regarded as members.
- 6.6 The amount to be paid for annual dues shall be laid down from time to time by the Executive Committee and incorporated by the By-Laws. The amount of dues so specified shall not apply to members in Independent Regions whose Representative may determine the level of annual dues, if any, to be collected.
- 6.7 Membership may be terminated for non-payment of dues extending over two years. In Independent Regions continuity of membership is maintained by annual registration of the members names with the Secretary by the Regional Representative.

Article 7. ELECTIONS

The election of officers should take place at each General Assembly during the International Botanical Congress (or its equivalent as determined by the Executive Committee).

- 7.1 The Executive Committee shall seek nominations for eight of its places (see Article 4) by advertising in the newsletter.
- 7.2 Nominations may be made in writing, by any member of IOP. These must be received by the Secretary no later than six months before the Congress at which the election shall take place.
- 7.3 All candidates must be current members of IOP, defined by their inclusion on the membership/election roll (see Article 6.2 above).
- 7.4 The Executive Committee shall determine the status of the nominees, ascertain that they are prepared to stand for election, and shall publish a list, in the form of a ballot, in the newsletter at least one month before the start of the Congress.
- 7.5 Each member whose name appears on the electoral roll (Articles 6.2 and 6.3) may vote. Member voting must have paid their membership dues to their Regional Representative for the year of the election. Voters from Independent Regions must have been validated as active IOP Members for the year of the election by the appropriate Regional Representative. Thus, all voting members must be individually registered on the Electoral Roll with the Secretary.
- 7.6 Any member who wishes to vote by mail may send their ballot to the Secretary, to be received before the time of the meeting of the General Assembly at the Congress. Each ballot paper should be enclosed in a sealed envelope with the voter's name clearly written on the reverse side of the envelope. Members who plan to attend the Congress may prefer to vote in person at the General Assembly.
- 7.7 Election of the President and of the Secretary shall be declared for the respective candidate who receives a simple majority of the votes cast.
- 7.8 Election of the three Vice-Presidents and of the three Members at Large of the Executive Committee shall be awarded to the candidates in each category who receive the largest number of votes.

Article 8. ADMINISTRATION

- 8.1.1 The General Assembly consists of all individual members. meetings of the General Assembly shall be held at each meeting of the International Botanical Congress and at such other International conferences as may be designated, with adequate prior notice, by the Executive Committee.
- 8.1.2 Meetings will be conducted in accordance with the customary Rules of Order (Encyclopaedia Britannica 19: 721, 1970).
- 8.1.3 The agenda of a General Assembly shall be determined by the Secretary and the Executive Committee and published in a newsletter in advance of the meeting.
- 8.2.1 The Executive Committee undertakes such business as may be delegated to it by the Constitution and By-Laws or by decisions of the General Assembly, or by requests of the President or Secretary.
- 8.2.2 The Executive Committee should meet at least once at each International Botanical Congress, prior to the meeting of the General Assembly. Otherwise, much of its business will be conducted by mail.

Article 9. FINANCES

Membership dues shall be determined by the Executive's Committee and laid down in the By-Laws. Dues are payable to the appropriate

Regional Representative on January 1st each year. Any surplus money, after payment of postal and duplication costs should be forwarded to the Secretary by the Regional Representatives. (See 5.2.2 and 6.6 for special provisions for members in Independent Regions.)

Article 10. AMENDMENTS

- 10.1 These statutes of the IOP may be amended only at a meeting of the General Assembly.
- 10.2 Amendments may be proposed by the Executive Committee or may be submitted to that committee by any member.
- 10.3 The Secretary will cause the proposed amendments to be published in the newsletter at least six months before the next General Assembly together with any comments the Executive Committee offers.
- 10.4 Amendments shall be effective if ratified by a two-thirds majority of members present at a General Assembly.

Article 11. LANGUAGE

The Official Languages of IOP will be those of IUBS. The use of English is advocated.

BY-LAWS

1. Membership dues - Dues for Individual and Corporate members are US \$10.00 or UK £5.00 per year.
2. Dues are payable to the appropriate Regional Representative and thence to the Secretary, who will use them in the production of the newsletter and for the business of the organisation.
3. A computer print-out of members' names and addresses is available to members from the Secretary, upon payment of a fee to cover costs determined by the Secretary.
4. A series of informal leaflets, named IOP Circulars, may be produced from time to time, with the authority of the Executive Committee. Production costs shall be paid by the author, from whom members may obtain free copies, though postal charges are discretionary.
5. The Executive Committee has agreed that from 1988 the following regions have the status of "Independent Regions" for the purposes of Article 5.3: India, Russia, China.
6. These By-Laws may be amended by a two-thirds majority of the Executive Committee provided that the proposed amendments have been circulated to the Committee at least three months before a vote is taken.