

INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY

MINUTES OF 40th MEETING OF BUREAU

Convention Center, Davos : 8 September 1979

Present: Prof. G. Smets (Chairman), Dr. J. W. Barrett, Dr. R. W. Cairns, Prof. A. R. H. Cole, Prof. N. M. Emanuel, Prof. O. Horn, Dr. O. Isler, Prof. A. Kjaer, Prof. J. Michalski, Prof. S. Nagakura, Prof. G. Ourisson, Prof. C. G. Overberger, Prof. A. Perez-Masiá, Prof. C. N. R. Rao, Prof. H. Zollinger (Elected Members); Prof. N. N. Greenwood, Prof. V. A. Kabanov, Dr. M. Roth, Prof. S. Sunner, Prof. H. Suomalainen, Dr. T. S. West, Prof. P. Yates (Section/Division Presidents)

Absent: Prof. A. Abou-El-Azm, Prof. Sir Derek Barton (Elected Members)

In Attendance: Prof. K. H. Büchel (in part - Chairman, COCI), Dr. H. Egan (in part - IUPAC Representative on SCOPE), Dr. S. Passman (in part - Observer from UNESCO), Dr. M. A. Paul (in part - Secretary, IDCNS), Dr. M. Williams (Executive Secretary)

1/79 INTRODUCTORY REMARKS AND FINALIZATION OF AGENDA

The following items were added to the agenda circulated by the Executive Secretary (79.07.31):

10.2.7 ICSU Committee on Data for Science and Technology

10.2.8 ICSU Colloquium on Energy

12.6 6th International Conference on Crystal Growth

12.7 International Symposium on Interaction of Particles in Colloidal Suspension

14.1 External Financial Support for Commission Activities

The President announced that Dr. S. Passman had been invited to attend the Bureau and Council meetings at Davos as an observer from UNESCO in order to become better informed of the activities of IUPAC.

2/79 MINUTES OF 39th MEETING OF BUREAU

2.1/79 Amendments and Approval of Minutes

The Minutes, as circulated by the Executive Secretary (78.12.21), were approved without amendment.

2.2/79 Matters Arising from Minutes

2.2.1/79 Nuclear and Radiochemistry (see 2.2.2/78)

Dr. West reminded the Bureau that two additional Titular Members had been appointed to the Commission on Analytical Radiochemistry and Nuclear Materials at Warsaw with a view to enlarging its terms of reference. Unfortunately Prof. S. Amiel had died subsequently and Prof. A. C. Pappas had not been in communication, so no progress had been achieved. The Analytical Chemistry Division Committee therefore recommended that no further attempt be made to change the terms of reference.

Prof. Greenwood reported that the Inorganic Chemistry Division Committee at Davos had invited Prof. E. Roth to reassess if there were any aspects of nuclear and radiochemistry worthy of IUPAC initiatives. If anything positive emerged his Division Committee would come forward with recommendations for consideration by the Bureau.

### 3/79 MINUTES OF 91st AND 92nd MEETINGS OF EXECUTIVE COMMITTEE

The Minutes were recorded as having been received officially by the Bureau.

#### 3.1/79 Contract Work with CEE (see 3.1.3/79)

The Executive Secretary reported a poor response from Section/Division Presidents with regard to taking up various possibilities for new collaborative work with CEE. The Applied Chemistry Division had suggested a collaboration on the subject of single cell protein, and the provision of recommended methods for the analysis of oils and fats might become the basis of an official contract. Dr. Barrett drew attention to a possible collaboration on reference materials with the Commission on Polymer Characterization and Properties.

#### 3.2/79 IUPAC Project Programmes Listing (see 3.2/79 and 3.6.2/79)

The Secretary General (letter of 79.05.10) had requested Section/Division Presidents to improve the state of material submitted for publication in future and by comparison of the Listings for 1976, 1977, and 1979 to define for themselves which programmes deserved continued or strengthened support and which could make room for new activities.

As a start to the drawing up of a listing of reports actually published or finished from Commission projects, the Executive Secretary had compiled details of publications from each Section/Division during 1974-8 plus those which had appeared so far in 1979. Section/Division Presidents had been asked to supply amendments and additions plus information on projects finished but not yet published. The Bureau agreed that the listing of reports should be closed at the end of 1979, but be updated annually. Prof. Ourisson suggested that it should be published in conjunction with the next Project Programmes Listing in 1981.

Prof. Sunner suggested that "liaisons" should not be included in future Project Programmes Listings and that there should be a differentiation made between short- and longterm programmes. Prof. Zollinger said he intended to make some remarks at the Council meeting in Davos, as incoming President of the Union, on the need to maintain and even increase the quality (rather than quantity) of all IUPAC activities.

### 4/79 CURRENT FINANCIAL STATUS

Prof. Horn reported briefly on the current financial status of the Union. There were US-\$102 973 in liquid funds and US-\$180 000 in shortterm investments (bankers acceptances), with about US-\$55 850 outstanding from 1978 and 1979 subscriptions of National Adhering Organizations and Company Associates. Expenditure on the Davos General Assembly was about US-\$149 000 in predistributed cheques and there were about US-\$5 500 in late claims under processing. (Note added after Davos: US-\$94 000 were distributed in cheques at Davos, making a total expenditure for the Assembly of about US-\$248 500, from which there would be some deductions for nonattendance.)

5/79 ITEMS FROM AGENDA OF 30th MEETING OF COUNCIL REQUIRING DISCUSSION,  
RESOLUTION, OR RECOMMENDATION BY BUREAU

5.1/79 Council Item 3 - Nominations for Officers and Bureau Members

The Bureau decided to recommend to Council that:

- (i) there should be 12 Elected Members of the Bureau during 1979-1981 (Statute 7.2);
- (ii) the Treasurer, plus Drs. R. W. J. Keay and W. Spindel (nonvoting Secretaries of the UK and USA Delegations, respectively) should be appointed as Tellers for the elections.

The candidates (9) exceeded the vacancies (6) for Elected Members of the Bureau, and the President reported on the guidelines of the Executive Committee (Minute 14.1/79, 93rd Meeting - Davos) for filling the vacancies. After a careful evaluation of the merits of the various candidates, the Bureau agreed to make the following recommendations in written form to Council for filling the vacancies (Bylaw 2.222):

Prof. Y. Jeannin (France)  
Prof. V. A. Koptug (USSR)  
\* Prof. A. Perez-Masiá (Spain)  
Prof. D. B. Tonks (Canada)  
Prof. A. Vlček (Czechoslovakia)  
Prof. H. G. Wagner (Federal Republic of Germany)

(\* reelection for a further period of four years)

The recommendations were not binding on the Council.

5.2/79 Council Item 4 - Time of Elections

The Bureau decided to recommend Council to hold the elections at 10.15 on 10th September 1979.

5.3 & 5.4/79 Council Item 8 - Tentative Budgets for 1980 and 1981  
Council Item 9 - Dues Structure and Fixing Annual Dues  
for 1980 and 1981

Because the Treasurer did not agree with the proposals of the Finance Committee the budgets for 1980 and 1981 (as of 79.09.06) were introduced to the Bureau by the Executive Secretary on behalf of the Finance Committee. There would be a balance in 1980 if half of the extra income from the proposed 10% increase in national subscriptions was forthcoming that year. Despite the limitation of US-\$325 000 set for the Leuven General Assembly (considerably less than the estimated total of US-\$440 000 for travel and subsistence), and assuming the total extra income would by then be received from the proposed increase in national subscriptions, a large deficit of nearly US-\$220 000 seemed inevitable for 1981. As an interim measure the Finance Committee suggested the deficit be met by realization of capital assets, and this had been accepted reluctantly by the Executive Committee (Minute 14.2/79, 93rd Meeting - Davos).

Dr. Williams pointed out that the new basic dues policy introduced at Washington in 1971 had led to some bad consequences for the Union. Most countries in the higher membership categories were counting Company Associate income as part of the national subscription. Also and regrettably, the basic unit for a Company Associate had been left at US-\$250 for 13 years.

Council at Davos would be asked to approve that a country may stay only one category lower than required by its chemical turnover. However, a more extensive reinvestigation of the Washington basic dues policy was now essential. One suggestion raised in the Finance Committee was for part of an increased Company Associate unit to be allocated to cover a service charge by IUPAC for each Associate, part to be allocated to COCI to stimulate liaison with industry and initiation of new industrial projects by the Union, with the rest available to help a National Adhering Organization meet its national subscription. An alternative was to reduce proportionately over a period of years the amount of Company Associate income permitted to count towards national subscription until a complete separation was achieved.

A subcommittee of the Finance Committee had been set up to look into the whole matter in detail and to report back to the Finance Committee by mid-January 1980. At its next meeting the Finance Committee might then hopefully be able to make recommendations to the Executive Committee (April 1980) with the intention of advising the National Adhering Organizations (early summer 1980 in readiness for Leuven in 1981) but subject to amendment if necessary by the Bureau (late summer 1980).

Finally, on behalf of the Finance Committee, the Executive Secretary said that because Category D was regarded as an introductory level of membership, Council should be recommended only to allow Venezuela to change from Category B1 to C, rather than return to D.

A proposal (dated 79.07.20) from the Spanish National Committee for IUPAC with regard to membership categories and annual dues was elaborated briefly by Prof. Perez-Masiá. At the suggestion of the President, the Bureau agreed to refer the proposal for consideration by the Finance Committee together with some views expressed by Prof. Cole. The latter had emphasized the need for IUPAC to raise the national dues more regularly, even annually and preferably in some way indexed to inflation in the member countries, otherwise the Union would fall even further behind its increasing expenditures.

Dr. Isler stressed the urgent need for the Executive Committee/Bureau to develop some longterm forward planning, a view already presented to the Executive Committee (Minute 14.2/79, 93rd Meeting - Davos) by the Finance Committee. Dr. Roth suggested it might be advantageous to change the currency for IUPAC financial transactions from US-dollars, but the possibility had already been rejected on the advice of the IUPAC Banker (Minute 4.2/79, Finance Committee - Zürich).

Prof. Zollinger said that the Officers of all IUPAC bodies had been invited by President Smets (letter of 79.05.04) to reduce voluntarily their titular memberships and to minimize costs of meetings in non-General Assembly years: some progress was evident already at Davos but the Treasurer expressed doubts that voluntary reductions would suffice.

The Secretary General reported that the Publications Committee agreed the Union's publications should be more profitable and had challenged Pergamon to double the circulation of the journal Pure and Applied Chemistry. The assistance of all members of IUPAC bodies was needed with positive propaganda: the quality of the issues was excellent and both rapid and regular publication was now being achieved. IUPAC had agreed to subsidize for a three-year trial period the editorial costs of Chemistry International while the subscription income was built up by Pergamon. However, the success of the news magazine would depend very much on the input from within the Union to the editor, Dr. M. Gellender.

Dr. Barrett pointed out that the item of largest increase in the 1981 budget

was the General Assembly at Leuven. That trend demanded a requirement for virtually a 50% rise in national dues and Company Associate subscriptions, which was impossible in practice. Therefore it was essential to find a mechanism for reducing the cost of the biennial General Assembly.

5.5/79      Council Item 10 - Applications for Membership of IUPAC

No reply had been received to the enquiry by the Executive Secretary about the present status of the Iranian Chemical Society (see Minute 6.4/79, 92nd Executive Committee - Paris). Therefore the Bureau decided to recommend Council not to consider the application (dated 78.09.20) for membership of the Union.

Prof. Smets summarized developments since the discussions by the Executive Committee earlier in the year on the participation of China in IUPAC (see Minute 2.2.3/79, 92nd Meeting - Paris).

Faced with a similar situation in recent months, IUB had moved very actively towards a solution acceptable to all parties, which was in process of final confirmation via a postal vote of the member countries. The IUB Officers had made considerable efforts to keep IUPAC informed in detail of the agreement and it had been used as a basis for discussions with People's Republic of China representatives in Helsinki and with PRC and Taiwan representatives in Davos. After agreement between the two delegations and the IUPAC Officers a formal resolution would be presented to Council at Davos.

To resolve the contradiction between the spirit of Statute 2, which defined the objects of the Union as applicable without discrimination to the chemists of the member countries, and Statute 3.1, which restricted membership to one national organization for a country, President Smets had resorted to Statute 14.4 and ruled that:

in the case of a country in which present circumstances make it impossible for all chemists to engage in coordinated scientific activities over the whole territory, "country" as used in Statute 3.1 shall designate a definite geographical territory, in which a community of chemists pursue independent scientific activities.

To ensure the representation in IUPAC of all chemists from China, Council should be asked to admit to membership of the Union the Chinese Chemical Society, Beijing, so that the membership list of Adhering Organizations would then read:

CHINESE CHEMICAL SOCIETY

CHINA

CHEMICAL SOCIETY LOCATED IN TAIPEI, CHINA

A revised form of Statute 3.1 would need to be prepared for approval by Council at Leuven in 1981.

Prof. Ourisson said that his memorandum of 79.05.09 to National Adhering Organizations on the representation of Chinese chemists in IUPAC should be withdrawn from the Council file at Davos. He went carefully through a replacement memorandum (79.09.07) and related documents, which were approved unanimously and without change of wording by the Bureau for presentation to Council. A covering draft resolution from the Bureau was left for the Secretary General to finalize later in the day following further discussions with the representatives from Beijing and Taipei.

5.6/79      Council Item 11 - Applications for Associated Organization Status

An application from the International Conferences on Organometallic Chemistry was supported by the Presidents of the Inorganic and Organic Chemistry Divisions.

The Bureau agreed to recommend acceptance by Council at Davos.

Satisfactory short statements of their current activities had been submitted by all 21 existing Associated Organizations, and the Bureau would recommend Council to allow them to continue in that status during the next biennium. The Bureau approved a suggestion from Prof. Greenwood that the Secretary General should monitor the activity statements more fully in future and prior to the General Assembly.

5.7/79      Council Item 12 - Reports of Division and Section Presidents

Prof. Sunner drew attention to three minor editorial amendments necessary to the Physical Chemistry Division Rules already circulated with a Bureau recommendation for approval by Council at Davos. His request to expand the name from "Commission on Colloid and Surface Chemistry" to "Commission on Colloid and Surface Chemistry including Catalysis" was supported by the Bureau for presentation to Council. Several Commissions had just reduced voluntarily their titular memberships and the Division would probably come forward in 1981 with the request to create a new Commission on Chemical Kinetics.

Prof. Greenwood said that the proposed Inorganic Chemistry Division Rules were based on those of the Physical Chemistry Division. Some slight changes to the precirculated version had been incorporated at Davos and the Bureau decided to recommend Council to adopt the amended Rules. Provision had been made specifically for membership of the Division being open equally to men and women, because the IUPAC Statutes and Bylaws referred almost exclusively to "he". As a clearer indication of the scope of its work, the Bureau would ask Council to approve a change in name from "Commission on Atomic Weights" to "Commission on Atomic Weights and Isotopic Abundances".

Revised Rules, elaborated by the Organic Chemistry Division at Davos, were tabled by Prof. Yates. The Bureau agreed to seek their approval by Council. A voluntary reduction in titular membership had been made by two Commissions and a third Commission would do so in 1981. The Division Committee had voted against the granting of sponsorship by the Union to regional symposia such as the 1st European Organic Chemistry meeting held recently in FRG.

In accordance with the wishes of the Bureau (see Minute 11.3/78, 39th Meeting - Brussels), Dr. West resubmitted the Analytical Chemistry Division Rules in less detailed form similar to that used by the Physical Chemistry Division. The new version was approved by the Bureau for presentation to Council at Davos.

The Bureau agreed to support a request from Prof. Suomalainen for Council to alter the name from "Commission on Fermentation" to "Commission on Biotechnology" and noted that guidelines for procedures of the Applied Chemistry Division tabled at the previous meeting (see Minute 11.3/78) were being elaborated further for presentation to the Bureau probably in 1980. Voluntary reduction in the titular memberships of some Commissions had been effected at Davos. In view of the fact that Associate Members were no cost to the Union, Prof. Suomalainen questioned whether Bylaw 4.304 should continue to restrict their normal total to eight with an increase to twelve only possible by special permission of the Bureau. The Secretary General thought the only difficulty might be for too large a body to work efficiently.

A written proposal for elevation of the Clinical Chemistry Section to Division status of the Union was presented by Dr. Roth. The Bureau recognized that since establishment as a Section in 1967, its scientific stature and that of its Commissions had now been proved adequately and acceptance of the proposal by Council would be recommended. A set of Section Rules tabled by Dr. Roth were allowed to go forward to Council with the proviso that the Executive

Secretary be allowed to carry out any necessary editing after the General Assembly.

5.8/79      Council Item 15 - Language for Official Records during 1979-1983

The Bureau decided to recommend to Council that English should be the one language in which the official records of the meetings of the Council, Bureau, and Executive Committee should be kept and published during the four years 1979-1983 (Statute 5.405).

5.9/79      Council Item 17 - Proposals Formally Received from National Bodies

A revised proposal from the US National Committee for IUPAC, for experimental modification of the structure of the Union to permit individual membership of Divisions, had been circulated to the Section/Division Presidents and discussed at their meeting in Davos. The Macromolecular and Analytical Chemistry Divisions had declined to participate in a trial evaluation. Dr. West said that the Division Presidents Group recognized and approved of the spirit and general intention to maximize the participation in IUPAC of all chemists and to bring in additional income, but they did not believe these aims could be accomplished easily by the proposed mechanism.

Prof. Overberger was anxious that the positive aspects of the proposal should not be forgotten, and his suggested change in emphasis of the formal resolution of the Division Presidents Group was approved by the Bureau for presentation to Council. Also the Bureau accepted a suggestion from President Smets that a Subcommittee - Dr. T. S. West (Chairman), Prof. V. A. Kabanov, Prof. S. Nagakura, Prof. C. G. Overberger, Prof. S. Sunner - be appointed to look further into the whole matter and report back at the next General Assembly. The Subcommittee should work initially by correspondence and perhaps meet in conjunction with the Bureau in 1980.

5.10/79      Council Item 19 - Proposals for New Bodies and Dissolution of Existing Bodies

The Executive Secretary reported that the Executive Committee (Minute 13.2.9/79, 93rd Meeting - Davos) was now in favour of there being 12 Titular Members until 1981 and 12 Associate Members until further notice for the proposed Commission on Pesticide Chemistry. The Bureau agreed to recommend Council to approve such a membership. It also agreed to support a proposal to Council for elevation of the Subcommittee on Solubility Data to Commission status with 6 Titular Members until 1981 (Minute 14.6/79, 93rd Executive Committee - Davos).

Justifications in writing from the Section/Division Presidents to allow all existing Commissions of the Union to continue for the next two years (Bylaw 4.302) were accepted by the Bureau and their continuation would be recommended to Council.

5.11/79      Council Item 23 - 28th Congress (Vancouver, 81.08.16-22)

There was a brief discussion of the scope of the Congress as indicated in the first circular. The Secretary General expressed the hope that any short papers would be confined to poster sessions and without oral presentation. Also he mentioned the suggestion of the Publications Committee that the seminar for chemistry journal editors cancelled from Strasbourg earlier in 1979 might be held in conjunction with the Congress. Prof. Kabanov strongly recommended that Session VIII(b) should be retitled "Macromolecules and Colloids". The Executive Secretary said that the organizers should be requested to avoid conflict and overlap with two other symposia being sponsored by IUPAC in 1981 in the colloids field.

Subject to financial stability of the Union, the Bureau agreed to recommend acceptance by Council of the invitation from the Danish National Committee of Chemistry to host the 1983 General Assembly at the Technical University of Denmark in Lyngby.

Despite reservations made by the organizers of the 1979 Congress at Helsinki recently on the need for future meetings to cover simultaneously several branches of pure and applied chemistry, Prof. Zollinger was convinced that IUPAC should not forgo the possibility of holding a Congress in 1983. He hoped that a member country would still come forward with an offer to host the Congress.

6/79 REPORT OF AD HOC INTERDIVISIONAL WORKING PARTY ON DATA FLAGGING

The Bureau noted that there had been no progress on the data flagging project and accepted the suggestion of the Chairman, Prof. D. N. Hulme, to dissolve the ad hoc Interdivisional Working Party.

7/79 REPORT OF COMMITTEE ON CHEMISTRY AND INDUSTRY (Prof. Büchel in attendance)

Prof. Büchel reported that in order to fulfil its terms of reference:

- (i) COCI had initiated a system of information newsletters via the National Company Associate Group conveners to guide and inform individual Company Associates on IUPAC programmes and policies. More effort should also be made by the conveners to hold meetings of the NCAGs. Another possibility was for the conveners to make use of national chemical industry associations.
- (ii) COCI was improving its liaison with the CHEMRAWN Committee to help establish important areas of chemical science in IUPAC related to ongoing industrial needs. A joint meeting was planned for February 1980. In addition the incoming President of the Union had requested COCI to make an investigation of all current IUPAC activities from an industrial point of view, for which COCI had created a special subcommittee.
- (iii) COCI had noted that one of the recommendations from the CHEMRAWN I Conference was for an international group to be formed to make a continuing assessment of the organic raw materials supply problem. It proposed to recruit experts for the group and to recommend how it could best function. Also to assist in putting to industry enquiries on major chemical matters, COCI intended to cooperate actively with such bodies as the IUPAC Subcommittee on Catalyst Activity, European Federation of Chemical Engineering (Prof. D. Behrens), CODATA (Dr. M. Schönberg), and SCOPE (Dr. H. Egan).

A problem for COCI mentioned by Prof. Büchel was the difficulty of making effective contact with the large number of Company Associates: it depended completely on the efforts of the national conveners, whose selection and activity was therefore of vital importance. Because of many other personal commitments Prof. Büchel could only devote a limited amount of time to COCI affairs.

Prof. Zollinger said that he intended to circularize the Officers of all IUPAC bodies, inviting them to collaborate with COCI in providing information on their activities. Prof. Ourisson strongly recommended COCI to make full use of Chemistry International (Dr. Gellender) as a medium for its work. Prof. Horn wondered if it would be worthwhile for COCI to invite to its meetings observers from countries which presently had no Company Associates.



Dr. West suggested that the COCI information letters should be made available to Section/Division Presidents and the Executive Secretary offered to do so through the Secretariat. Profs. Perez-Masiá and Michalski requested the help of COCI to recruit some Company Associates in Spain and Poland, respectively, and Prof. Büchel advised that the information letter was a useful document for such purposes. Prof. Cole suggested that COCI might advantageously prepare a basic document on the benefits of becoming a Company Associate.

In conclusion Prof. Büchel drew attention to the following matters:

- (i) COCI did not consider itself to be a direct money-raising body, but it would support and suggest ways for that to be done in appropriate cases (e.g. continuation of the work on catalyst reference materials), provided the Bureau agreed (Statute 9.42). President Smets said that he would be addressing the Bureau later in the meeting on the general matter of solicitation of funds by IUPAC bodies (see Minute 14/79).
- (ii) IUPAC needed a permanent "think tank" for new projects, which should not be COCI itself although COCI could help. The "think tank" should be more widely based - interdivisional - than the present Subcommittee on New Projects of the Applied Chemistry Division, which in any case was shortly to make its final report and close down. The idea of a longrange planning body was received favourably by Profs. Smets and Zollinger, but Dr. West was apprehensive of yet another such body being imposed on the Sections/Divisions. He felt that the CHEMRAWN Committee was already doing part of the envisaged work.

#### 8/79 REPORT OF COMMITTEE ON TEACHING OF CHEMISTRY

In his capacity as Chairman, Prof. Rao tabled a brief report (as at 79.09.06) covering publications, conferences, other activities and new activities of CTC. He asked for better publicity to be given within IUPAC in future to CTC publications in view of the changed distribution for No. 11 (September 1979) onwards of the International Newsletter on Chemical Education. Prof. Ourisson said that excellent publicity was possible via Chemistry International (Dr. Gellender).

#### 9/79 REPORT OF INTERDIVISIONAL COMMITTEE ON NOMENCLATURE AND SYMBOLS (Dr. Paul in attendance)

After apologizing for the unavoidable absence of the IDCNS Chairman, Dr. K. L. Loening, Dr. Paul drew attention to the general purpose of IDCNS: to improve the quality and consistency of IUPAC recommendations on nomenclature, symbols, and terminology -

- (i) within IUPAC, by ensuring all relevant Commissions were aware of and concurred in new proposals;
- (ii) with other international organizations with which IUPAC was in liaison (notably BIPM, ISO, IUB, IUPAP).

New recommendations from the Sections/Divisions were normally handled by correspondence: all IDCNS members had the possibility to comment, but two or more members were always assigned to make a detailed review and outside experts were consulted occasionally. Depending on the level of comments, recommendations were either cleared for publication without qualification or subject to certain conditions, or they were held over for broader discussion with the originating Commission. The system was working well in practice, 9 reports having been reviewed in the past year and 22 since Warsaw. Dr. Paul regretted the poor contact so far with the Scientific Editor of PAC,

and he reemphasized that the Sections/Divisions, not IDCNS, were responsible for ensuring that all documents were linguistically acceptable. IDCNS was still concerned about the extent of dissemination of published IUPAC recommendations, which needed to be wider than at present.

The Bureau accepted the renomination of Dr. Loening and Prof. N. Lozac'h for a second term as Chairman and Vice-Chairman of IDCNS and the nomination of Dr. R. Fox (USA) as Secretary to succeed Dr. Paul, who was retiring at Davos. The Executive Secretary reminded the Section/Division Presidents that a nomination from each of them was awaited for a Member of IDCNS for the next four years. The Executive Committee at Davos (Minute 16.1/79, 93rd Meeting) had agreed that there should be a second person designated from each Section/Division with the title Associate Member but without financial obligation to the Union.

#### 10/79 RELATIONS WITH OTHER ORGANIZATIONS

At the invitation of President Smets, Dr. Passman made a few remarks on behalf of UNESCO. The activity of nongovernmental organizations like IUPAC was greatly appreciated and he hoped there would be an increase in the UNESCO subvention to them in future. However, it was important to submit well in advance any proposals for projects requiring funding. Continued UNESCO support was expected for appropriate activities of IUPAC's Committee on Teaching of Chemistry. Efforts were being made in developing countries to set up regional networks for natural products and the formation of regional federations of national chemical societies was being encouraged. Discussions would shortly be held (Tenerife, 79.09.18-20) on the possible establishment of an international centre for chemical education and research, but recognition of a collection of groups seemed more likely than the designation of a single geographical location. Attention was drawn to the current issue of the UNESCO Courier on "green medicine".

#### 10.1/79 Collaboration with ISO (see Minute 6.1/79, 92nd Executive Committee - Paris)

Dr. M. Parkany (ISO Central Secretariat) had been present at Davos to try and improve relations and collaboration with relevant Divisions of the Union.

Prof. Kabanov said that in 1978 the Macromolecular Division had rejected any further collaboration with ISO on plastics because the existing mechanism for commenting on ISO draft International Standards was too involved for an effective input from IUPAC. It had now been agreed to designate a member from each Commission of the Macromolecular Division to receive the ISO drafts well in advance, with the Division view on final proposals to be given in person by an IUPAC representative whose expenses would be met by ISO.

Dr. West reported that it was also hoped to involve the Analytical Chemistry Division at an earlier stage in the future elaboration of ISO Standards, but their discussions with Dr. Parkany were not so advanced as in the case of the Macromolecular Division. He was still concerned to have some feedback from ISO on comments submitted by IUPAC experts.

#### 10.2/79 ICSU Matters

#### 10.2.1/79 11th ICSU General Committee (Brussels, 79.07.04-05)

A summary of the decisions and recommendations of the General Committee, plus reports on meetings of the ICSU Committee on Admissions and Subcommittee on Scientific Priorities, had been circulated prior to the meeting of the Bureau.

Prof. Smets pointed out that the total of about US-\$220 000 from the UNESCO subvention provisionally allocated to the scientific unions in 1980 was rather

small. In any case the basic allocation of US-\$8 000 to each union was not acceptable to such a broadly active body like IUPAC. Furthermore, Prof. Smets was particularly disappointed at the response from ICSU for funding (US-\$66 500) of a number of IUPAC special projects in 1980. Apart from the project on locally-produced equipment and experiments for chemistry teaching (US-\$5 000), only CHEMRAWN had been allocated any money (US-\$5 000). He had therefore just submitted a detailed application for a high level of financial support (US-\$75 000) for the CHEMRAWN II Conference, and he urged Dr. Passman to give sympathetic consideration.

#### 10.2.2/79 ICSU Abstracting Board

In presenting a brief report (as at 79.08.23), Dr. Barrett pointed out that the financial stability arising from a major reorganization of ICSU AB should facilitate better progress on the various programmes. First reports were expected in October 1979 on projects concerned with format of abstract and titles in primary and secondary publications and with overlap of vocabularies for physics and for chemistry. Collaboration from IUPAC was needed in both cases and would also be required if it was decided to proceed with an International Classification System for Chemistry. Dr. Barrett agreed that the editing of International Serials Catalogue had not been uniform and acknowledged the errors detected by Prof. Ourisson, but nevertheless he firmly believed it to be a valuable reference work. The Bureau noted that Dr. P. Rhyner (Switzerland) was likely to succeed Dr. Barrett as official representative to ICSU AB for the next biennium.

#### 10.2.3/79 ICSU Scientific Committee on Problems of Environment (Dr. Egan in attendance)

A status report had been precirculated from Dr. Egan. The current major SCOPE programme of most interest to IUPAC was on biogeochemical cycles, but the Union should also be concerned with the activity on methodologies for safety evaluation of chemicals, which should have special relevance for COCI. Climate control and ecotoxicology were other SCOPE projects with which IUPAC might become associated. Ideally these areas should all be represented in the membership of the IUPAC Committee on SCOPE, probably through relevant experts from the Sections/Divisions. As a start towards reactivating the Committee, Dr. Egan had invited COCI to identify a person to act as Secretary.

Prof. Smets welcomed the recent appointment of Dr. Egan to the SCOPE Executive Committee and he urged the Section/Division Presidents to give more effective support in future.

#### 10.2.4/79 ICSU Committee on Genetic Experimentation

Reports had been supplied by Dr. A. F. Langlykke, official representative of IUPAC, on the 1979 assembly of COGENE and associated meetings. Prof. Smets drew attention to the view that their meetings must be held more frequently than once per year if COGENE was to have an authoritative impact on the rapidly growing field. The Bureau agreed to a continuation of IUPAC involvement in COGENE through Dr. Langlykke.

#### 10.2.5/79 Review of Official Representatives of IUPAC on Other Organizations

As incoming President of the Union, Prof. Zollinger said that he was in process of reviewing the present representatives and would report back in due course regarding his appointments for the next biennium. He proposed to retain Prof. Smets as representative to the ICSU General Committee in order to continue the strong line taken by him during the past two years.

10.2.6/79 IUPAC-IUB ad hoc Committee on Radioactive and Isotopic Specifications of Labelled Compounds

The Bureau noted that the work of the ad hoc Committee (see Minute 13.3/77, 87th Executive Committee - Washington) had been taken over by the IUB-IUPAC Joint Committee on Biochemical Nomenclature.

10.2.7/79 ICSU Committee on Data for Science and Technology

A short report was tabled from the official representative of IUPAC, Prof. R. N. Jones. Prof. Sunner advised that as a result of discussions at Davos there was no longer concern about overlap and liaison between Commissions and Subcommittees of the Physical Chemistry Division and CODATA Task Groups.

10.2.8/79 ICSU Colloquium on Energy

Further to the report of an ad hoc Group on Energy chaired by Prof. Smets, ICSU had agreed to hold in conjunction with its 1980 General Assembly a short colloquium concerned with research and research requirements in the fields of non-conventional energy. Prof. Smets invited the Section/Division Presidents and Prof. Emanuel to suggest names of possible lecturers.

11/79 NOMINATIONS OF NEW OFFICERS AND MEMBERS OF IUPAC BODIES

11.1/79 Ratification of Nominations Approved by Correspondence

The nominations of the following new Members of IUPAC bodies (Bylaw 4.304), approved through correspondence by the President since the 92nd Executive Committee meeting, were ratified by the Bureau:

Committee on Chemistry and Industry

Dr. C. W. SUCKLING (UK) - to replace Dr. J. W. Barrett  
after Davos

Interdivisional Committee on Nomenclature and Symbols

Prof. V. GOLD (UK) - to replace Mr. S. P. Klesney (resigned)

Commission on Analytical Nomenclature

Prof. S. P. PERONE (USA) - to move from Associate to Titular  
Membership (1977-1981) to replace  
Prof. L. B. Rogers (resigned)

11.2/79 Involvement of Younger Chemists in IUPAC Affairs

Prof. Smets drew attention to the ending shortly of the funding in UK from the Wates Foundation. On the recommendation of the Executive Committee (see Minute 7.3/79, 92nd Meeting - Paris), the Bureau resolved to ask National Adhering Organizations to continue their efforts to support the participation of younger chemists as observers at future meetings of IUPAC Commissions. Prof. Greenwood suggested that national chemical societies be approached to help, and Prof. Rao referred to the possibility of using COSTED funds.

Prof. Zollinger spoke strongly in favour of the Younger Chemists Scheme, mentioning the presence of several young Swiss chemists at Davos with a particularly high participation from industry. Prof. Ourisson had asked Dr. Gellender to contact some of the young chemist observers with the idea of publishing their views in Chemistry International. Also he had requested UNESCO to take action through its network of regional offices to get observers from developing countries.

## 12/79 SPONSORSHIP: REPRESENTATION, SPONSORSHIP, SUBVENTION

### 12.1/79 Ratification of Sponsorships Approved by Correspondence

The sponsorships of symposia, approved through correspondence by the President since the 92nd Executive Committee meeting (see Appendix A), were ratified by the Bureau. Sponsorship had not been granted in one case because the quality fell below the standard required for an IUPAC meeting.

### 12.2/79 Ratification of Official Representatives to Symposia in 1979

The appointments of official representatives of IUPAC to its sponsored symposia in 1979, as made by the President through correspondence since the 92nd Executive Committee meeting (see Appendix B), were ratified by the Bureau.

### 12.3/79 21st International Conference on Coordination Chemistry (Toulouse, 80.07.07-11)

No financial subvention was granted by the Bureau: a well established series of meetings and without any special factors applicable on this occasion; concern was expressed at the entertainment budget.

### 12.4/79 6th International Conference on Thermodynamics (Merseburg, 80.08.26-29)

No financial subvention was granted by the Bureau: concern was expressed at the entertainment budget.

### 12.5/79 Joint ISMAR-AMPÈRE International Conference on Magnetic Resonance (Delft, 80.08.25-30)

No financial subvention was granted by the Bureau: an established series of meetings and without any special factors applicable on this occasion.

### 12.6/79 6th International Conference on Crystal Growth (Moscow, 80.09.10-16)

Sponsorship was in process of being granted. Because it was an inter-union activity, the Bureau approved (10 in favour, 9 against) a recommendation from President Smets to grant US-\$1 000 to support the travel of young scientists.

### 12.7/79 International Symposium on Interaction of Particles in Colloidal Suspension (Canberra, 1981)

Sponsorship was in process of being granted. No financial subvention was granted by the Bureau: an IUPAC General Assembly year and the IUPAC budget forecast for 1981 showed a considerable deficit.

## 13/79 PUBLICATIONS

There were no publications matters requiring consideration by the Bureau.

## 14/79 EXTERNAL FINANCIAL SUPPORT FOR COMMISSION ACTIVITIES

Prof. Smets informed the Bureau that the Executive Committee (Minute 13.2.8/79, 93rd Meeting - Davos) believed it was now vital to the future of the Union for all IUPAC bodies actively to solicit external funds to subsidize their work. However, in keeping with Statute 9.42, the Bureau (especially the relevant Section/Division President, Treasurer, and Secretariat) should be kept informed.

Any funds arising must be handled through the official IUPAC bank account with allowance, where applicable, for an overhead of about 10% for Secretariat administrative costs.

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CHAIRMAN: H. Toller

DATE: Sept 1st, 1980

SPONSORSHIP OF SYMPOSIA APPROVED BY PRESIDENT

SINCE 92nd EXECUTIVE COMMITTEE MEETING

International Symposium on Statistical Mechanics of Phase Transitions  
in Polymers  
(Cleveland, USA: 80.06.11-13)

Symposium on Macrocyclic Ligands  
(Basel, Switzerland: 80.07.03-05)

21st International Conference on Coordination Chemistry  
(Toulouse, France: 80.07.07-11)

8th IUPAC Symposium on Photochemistry  
(Seefeld, Austria: 80.07.13-19)

Joint ISMAR-AMPÈRE International Conference on Magnetic Resonance  
(Delft, Netherlands: 80.08.25-30)

6th International Conference on Thermodynamics  
(Merseburg, German Democratic Republic: 80.08.26-29)

International Symposium on Polymerization Mechanisms  
(Liverpool, UK: 80.09.03-05)

2nd International Conference on Environmental and Occupational  
Toxicology of Nickel  
(Swansea, UK: 80.09.08-10)

2nd BOC Priestley Conference  
(Birmingham, UK: 80.09.15-18)

3rd International Symposium on Marine Natural Products  
(Brussels, Belgium: 80.09.16-20)

12th International Symposium on Chemistry of Natural Products  
(Tenerife, Spain: 80.09.21-27)

International Symposium on Chemical Indices and Mechanisms  
of Organ-Directed Toxicity  
(Barcelona, Spain: 81.03.04-07)

4th International Conference on Surface and Colloid Science  
(Jerusalem, Israel: 81.07.05-10)

6th International Symposium on Carotenoids  
(Liverpool, UK: 81.07.26-31)

10th International Conference on Organometallic Chemistry  
(Toronto, Canada: 81.08.09-14)

International Symposium on Chemical Physics  
(Moscow/Yerevan, USSR: 81.10.01-07)

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Sponsorship not granted to:

International Symposium on Ion Exchange  
(Bhavnagar, India: December 1980 or January 1982)

(see also Appendix D, 92nd Executive Committee)

- 6th International Conference on Solid Compounds of Transition Elements  
(Stuttgart, FRG: 79.06.12-16) - Prof. H. NOWOTNY
- 21st Colloquium Spectroscopicum Internationale  
(Cambridge, UK: 79.07.01-06) - Prof. J. ROBIN
- 5th International Conference on Modified Polymers  
(Bratislava, Czechoslovakia: 79.07.03-06) - Prof. J. KÁLAL
- 19th Microsymposium on Macromolecules  
(Prague, Czechoslovakia: 79.07.09-12) - Prof. V. HEROUT
- 20th Microsymposium on Macromolecules  
(Prague, Czechoslovakia: 79.07.16-19) - Prof. I. WADSÖ
- Herzberg International Conference on Van der Waals Molecules  
(Quebec, Canada: 79.08.01-03) - Dr. L. S. RENZONI
- 8th International Mass Spectrometry Conference  
(Oslo, Norway, 79.08.12-18) - Dr. R. HAGEMANN (to replace Prof. J. H. BEYNON)
- 7th International Congress of Heterocyclic Chemistry  
(Tampa/Florida, USA: 79.08.12-17) - Letter of greetings
- 3rd International Conference on Surface and Colloid Chemistry  
(Stockholm, Sweden: 79.08.20-25) - Prof. J. LYKLEMA
- 3rd International Conference on Chemical Education  
(Dublin, Ireland: 79.08.27-31) - Prof. C. N. R. RAO
- 27th IUPAC Congress  
(Helsinki, Finland: 79.08.27-31) - Prof. G. SMETS
- 4th International Symposium on Plasma Chemistry  
(Zürich, Switzerland: 79.08.27-09.01) - Prof. C. B. ALCOCK
- 4th International Symposium on Mycotoxins and Phycotoxins  
(Lausanne, Switzerland: 79.08.29-31) - Dr. K. KOJIMA
- International Symposium on Aromaticity  
(Dubrovnik, Yugoslavia: 79.09.03-05) - Telegram of greetings
- 9th International Conference on Organometallic Chemistry  
(Dijon, France: 79.09.03-07) - Dr. D. M. P. MINGOS
- International Conference on Mössbauer Spectroscopy  
(Portorose, Yugoslavia: 79.09.10-14) - Letter of greetings
- International Symposium on Macromolecules  
(Mainz, FRG: 79.09.17-21) - Prof. G. SMETS
- International Conference on Phosphorus Chemistry  
(Halle, GDR: 79.09.17-21) - Prof. J. MICHALSKI
- International Symposium on Polymeric Amines and Ammonium Salts  
(Ghent, Belgium: 79.09.24-26) - Prof. V. A. KABANOV
- International Symposium on Phosphorus Chemistry Directed Towards Biology  
(Łódź, Poland: 79.09.25-28) - Prof. J. MICHALSKI
- International Symposium on New Horizons in Hydrocarbon Chemistry  
(Los Angeles, USA: 79.12.10-11) - Prof. H. ZOLLINGER