INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY

MINUTES OF 59th BUREAU MEETING

Villa Sacro Cuore, Triuggio/Milan, Italy: 23rd-24th September 1990

Present: Prof. Y.P. Jeannin (Chairman), Prof. A.J. Arvía, Prof. A.J. Bard, Prof. M.T. Beck, Prof. A. Björkman, Prof. R.D. Brown, Dr. Mary L. Good, Prof. W.-Y Huang, Prof. J. Jortner, Prof. G. Modena, Prof. N. Sheppard, Prof. H.A. Staab, Prof. I. Wadsö, Prof. T.S. West, Prof. K.I. Zamaraev (Elected Members); Prof. G.M. Schneider, Prof. E. Fluck, Prof. Irina P. Beletskaya, Prof. W. Heitz, Prof. G. den Boef, Dr. L.E. Coles, Prof. N. Montalbetti, Prof. C.G. Wermuth (Division/Section Presidents); Dr. D. Wyrsch (Committee on Chemistry and Industry)

<u>Absent</u>: Prof. S. Itô, Prof. V.A. Koptyug (Elected Members); Prof. J.M. Thomas (CHEMRAWN Committee)

<u>In Attendance</u>: Prof. C.N.R. Rao (Coordinating Committee on Chemistry and Advanced Materials Programme) - in part, Dr. M. Williams (Executive Secretary), Miss A. Troughton (Deputy Executive Secretary), Dr. M.H. Freemantle (Information Officer/Affiliate Affairs Secretary)

1/90 INTRODUCTORY REMARKS AND FINALIZATION OF AGENDA

The President presented apologies for non-attendance from Profs. Itô and Thomas (for personal reasons). He reported that, unfortunately, Past-President Koptyug had been taken ill at Triuggio.

The following item was added to the agenda circulated by the Executive Secretary (90.09.11):

3.2.5 ENTVAPOR (Minute 4.4.1/90)

2/90 MINUTES OF 57th AND 58th MEETINGS OF BUREAU

2.1/90 Amendments and Approval of Minutes

- (i) The Minutes of the 57th Meeting (Lund) were approved, subject to changing "1993" to "1992" for Dr. A. Chester (Minute 12.1/89).
- (ii) The Minutes of the 58th Meeting (Lund) were approved, subject to inclusion of the exceptional reasons for the membership extensions of Dr. E.R. Cohen on Commission I.1 [Minute 20(vi)/89: liaison with ICSU-CODATA and IUPAP], of Prof. O.M. Nefedov on Commission III.2 [Minute 20(ix)/89: completion of compilation of physical data on carbenes], and of Prof. V.A.

Kabanov on Commission IV.2 [Minute 20(x)/89: project work on ternary composites - polypropylene/elastomers/reinforcement].

- 2.2/90 Matters Arising from Minutes
- 2.2.1/90 <u>International Centre for Chemistry</u> (Minute 2.2.2/89, 57th Bureau: Prof. Rao in attendance)

Prof. Rao reported that he was Chairman of the Steering Committee for the International Centre for Pure and Applied Chemistry at Trieste. So far there had been two informal meetings of the Committee and a formal meeting was scheduled for December 1990. The Steering Committee might be changed to a Management Committee, which would discuss the finance needed for 1991 and the establishment of some chemistry research facilities at Trieste. Such facilities were not available in some third world/less developed countries. Two major workshops had been organized, one on photochemistry and another on polymer chemistry, with 60-70 participants.

Prof. Modena had little else to add, except to mention the involvement of the Third World Academy of Sciences, which was also located at Trieste.

Prof. Heitz said that the Macromolecular Division of the Union had not been informed about the polymer workshop. Dr. Wyrsch asked if IUPAC had a role to play, and Prof. Rao agreed to comment on this aspect, when he reported back officially to President Jeannin after the December meeting.

Prof. Sheppard was sympathetic to the creation of a Centre devoted to teaching, but not to research, which would be very expensive as regards installation of major equipment. In addition, he would support the provision of an analytical service. Prof. Jortner was generally in favour of the Centre.

2.2.2/90 COCI Membership from China and USSR (Minute 3.6/89, 57th Bureau)

In the absence of Prof. Koptyug, there was no news about the selection of two or three chemical plants in USSR to become CAs and of identifying a Soviet representative to COCI.

Prof. Huang drew attention to the delegation from China of two observers to the forthcoming meeting of COCI (Paris, 90.09.28-29), after which he hoped that their two petrochemical organizations might become CAs in 1991.

2.2.3/90 Abolition of Chemical Weapons (Minute 5.6/89, 57th Bureau; draft Minute 25.3/89, 35th Council - Lund)

The Secretary General reported that he had requested ICSU (26th ICSU General Committee: Lisbon, 89.10.11-14) to examine the question of the abolition of weapons of mass destruction. In particular, IUPAC might look at chemical weapons and other parts of ICSU might study different aspects (biological, nuclear). He had asked the ICSU Executive Board to initiate this examination, and he hoped to learn shortly (23rd ICSU General Assembly: Sofia, 90.10.01-05) what had transpired.

2.2.4/90 Approval of New Members of Division Committees and Commissions (Minute 20/89, 58th Bureau)

- (i) Minute 20(ii/iii)/89 The Bureau endorsed the decision by correspondence of the President that, in order to comply with the statutory twelve-years maximum, the terms of service of Dr. Christine Sénémaud and Prof. M. Zander as Associate Members on the Commission on Spectrochemical and Other Optical Procedures for Analysis should be limited to 1989-1991.
- (ii) The President drew the attention of the Bureau to the notes added to Appendix A, updating the situation in some membership cases since Lund.
- (iii) The President referred briefly to recent correspondence, regarding the nomination of Prof. H. Grünewald as an Associate Member of the Commission on Nomenclature of Organic Chemistry, and his non-approval by the FRG-NAO. Prof. Staab made some remarks, and mentioned that Prof. Grünewald was no longer working for Gesellschaft Deutscher Chemiker/Verlag Chemie. The Bureau decided to uphold the stance taken by the FRG-NAO (Bylaw 4.304): the President would write personally to the Chairman of the Commission and to Prof. Grünewald on the matter.

3/90 MINUTES OF 114th MEETING OF EXECUTIVE COMMITTEE

3.1/90 Receipt of Minutes

The Minutes of the meeting at Athens were recorded as having been received officially by the Bureau.

3.2/90 Matters Arising

3.2.1/90 Proposed IUPAC-UNESCO Initiative in Latin America (Minute 3.1/90)

(i) The President reported that he had met the Director General of UNESCO in Paris on 90.07.18. Dr. F. Mayor was ready to accept the proposal for an IUPAC Seminars/Visiting Professorships (IVPs) Programme, to start in 1991 with funding of USD 25 000 under the personal supervision of Prof. Jeannin at the request of the Director General of UNESCO. He would be meeting Dr. J.V. Kingston of UNESCO in October to discuss how to implement the Programme. Meanwhile, Prof. Jeannin was ready to accept suggestions from Bureau Members.

Prof. Wadsö asked about the status of the main proposal for an IUPAC-UNESCO Initiative in Latin America. The President said that it was not yet accepted by UNESCO, and the plans to establish a Directive Council were effectively frozen. Dr. Wyrsch suggested that it might be possible to seek financial support from other organizations than UNESCO. Prof. Jortner stressed the importance of helping to build up an infrastructure in LA, and there was also a social factor: high quality standards were essential and preservation thereof. Prof. Montalbetti mentioned that the International Federation of Clinical Chemistry had implemented a similar scheme in Latin America, and it was acting especially as a consultant.

(ii) Concerning a proposed Latin-American Chemical Information Network, the President had consulted Dr. S.R. Heller (CCDB), who recommended IUPAC to defer any action. At present even telephone communication was difficult in LA. Furthermore, Dr. Good said that it would be better for LA countries to join an existing international information network However, Prof. Sheppard pointed out that at some remote universities, there were not even any journals, so the availability of a network was important.

3.2.2/90 Re-evaluation of Presidential Rulings (Minute 3.2/90)

- (i) The Executive Secretary had drafted a circular letter to the NAOs, based on the recommendations of the Executive Committee for changes to the Statutes and Bylaws. The Bureau agreed to support the recommendations for adoption by Council at Hamburg, and asked the Secretary General to circulate the letter on 90.10.01 in accordance with the requirements of Statute 14.3 and Bylaw 6.2.
- (ii) In order to allow the President of the Union sufficient time to implement new ideas, with approval of the Council, Prof. Jeannin suggested that the term of office should be for four years (or re-election should be possible for a second period of two years).

The Executive Secretary drew attention to the fact that, even as recently as 1959-1963 (IUPAC Handbook 1989-1991, page xii), the Presidential term had been for four years. To avoid difficulties/need for a re-election, Prof. Modena preferred the term to be simply for four years. However, the Secretary General felt that such a term might be a deterrent in recruiting top chemists for the Presidency.

Prof. Zamaraev said that, if re-election of the President became possible, it could affect the periods of service for the Vice-President and Past-President. A further consequence, pointed out by Prof. Björkman, was that a four-years rather than the present biennial critical assessment of IUPAC projects and programmes by the Vice-President might become necessary, which he regarded as detrimental. Prof. Wadsö wondered if more responsibility might be given to the office of Past-President.

Dr. Good was strongly against the introduction of an, in effect, twelve-years combined term for Vice-President/President/Past-President. Several different combinations of terms of office were put forward by various Members of the Bureau, before Prof. den Boef objected to such an important matter being introduced for discussion without it having first being included officially on the meeting agenda.

The Executive Committee was asked to prepare a position paper on the matter for consideration by the Bureau at Hamburg.

3.2.3/90 Continuation of IUB-IUPAC Joint Commission on Biochemical Nomenclature (Minute 3.3/90)

The Bureau noted that the IUB Executive Committee had now agreed to the continuation of JCBN for three more years, i.e., until the end of 1992.

3.2.4/90 Chairmanship of IDCNS (Minute 4.7.2/90)

A telefax communication was received from Prof. I.M. Mills at Triuggio during the Bureau meeting, accepting the invitation of the President to take over the Chairmanship of IDCNS from the end of the 1991 General Assembly.

3.2.5/90 ENTVAPOR (Minute 4.4.1/90)

Dr. S.R. Heller had indicated the size of the ENTVAPOR database to be such, that one could not expect an IUPAC vending initiative to be of interest to major online organizations. In fact, Dr. D.R. Lide, Jr. (previous Chairman, CCDB), had already met with a lack of response in this respect. The best hope was to have a few databases available, and to try to sell them as a package deal to possible vendors.

Dr. Good supported Prof. Bard's previously expressed concern to make some progress on the matter. Her suggestion was accepted for CCDB to come forward with some rules/ guidelines for consideration by the Bureau at Hamburg.

4/90 FINANCIAL MATTERS

4.1/90 Report of Treasurer

Prof. Björkman reported on the following financial matters:

- (i) The IUPAC accounts for 1989 (Minute 4.2.2/90, 114th Executive Committee) would be published prior to Hamburg in the November 1990 issue of CI. He explained briefly why a forecast deficit of USD 86 000 had been turned round into a surplus of USD 53 000 (savings on Lund General Assembly and on spending by Divisions/Standing Committees, additional income from assets and publications, but overspending on office expenses and significant foreign exchange differences). If it had been identified earlier, the money from the underspending on IUPAC bodies might have been put to immediate active use by the Union.
- (ii) The IUPAC assets were still comfortably above the policy minimum requirement to have coverage of the Union's expenditure for the previous two years. He referred briefly to his recent conversation with Dr. A. Hartmann, a former Member of the Finance Committee, who continued to advise the Union particularly on investment and currency matters. Dr. Hartmann suggested that IUPAC should give some East European countries a rebate on their subscriptions and a graduation period to reach their 4L-scheme level. Also, he emphasized the need to use low cost meeting venues.
- (iii) The budget of USD 10 000 for IUPAC representatives on other organizations in 1990 had already been exceeded. However, some such costs might be considered to be part of the new mission-oriented (horizontal) programmes.
- (iv) Regarding the suggestion by Dr. J. Brunner of a forward plan for IUPAC (Minute 4.2.5/90, 114th Executive Committee), the Treasurer said that one

biennial budget only could be operative in the Union. However, one might create different scenarios, which gave guidance to future developments.

(v) There were some misunderstandings of his position as Treasurer. He was not a banker, nor an accountant, nor a "rubber stamp". Statute 6.51 specified his responsibility for the accounts, expenditures, and budget preparation. His mission, in conjunction with his fellow Officers, was essentially to promote the best possible use of IUPAC funds. Therefore, he must be well informed by all persons and parties, who drew on these funds.

Prof. Wermuth had difficulty in following the presentation of the Treasurer. In future, he suggested that Prof. Björkman should precirculate his report to the Bureau.

4.2/90 Computerization of Accounts at Secretariat/Auditing [Minute 4.2.1(viii)/90, 114th Executive Committee)

The Treasurer reported that computerized accounting had been in operation at the Secretariat since 90.01.01. He had visited Oxford during 90.06.20-22 to review the situation and also to see what could be generated in 1991 in the way of management accounting. There was still much to be done, but considerable progress had been achieved. The main object in 1990 was to be able to produce the annual statement of accounts. Since mid-1990 the senior staff were able more easily to review, at the end of each month, the state of expenditure versus budget for the various IUPAC bodies and operations.

Prof. Schneider felt that this facility would enable Division/Section Presidents to utilize much better their entire biennial budget allocations. The Treasurer supported the view of the Secretary General that, unless some of the existing workload was taken away from the Secretariat, there would be a need to increase the staffing.

4.3/90 Revised Budget Procedure for 1992-3/Guidelines for Handling IUPAC

Income and Expenditure

[Minute 4.2.1(iii)/90, 114th Executive Committee]

The precirculated draft proposal of the Treasurer for the budget procedure in 1992-3 had been discussed by the Division/Section Presidents on the previous day. It had been accepted in principle (Minute 3.1/90, Division/Section Presidents - Triuggio), but the difference between A- and B-programmes needed clarifying, particularly the concept of B-programmes. Prof. den Boef asked for the clarification to be made urgently, so that he could write to his Commissions in October as envisaged in the proposal. In order that IUPAC bodies could receive higher budget allocations in future, Prof. Wermuth stressed the need to raise the income of the Union. The Treasurer indicated that he intended shortly to give advanced warning to the NAOs of the need to increase national subscriptions by 5% for the 1992-3 biennium. In addition, Prof. Björkman hoped that the costs for the Lisbon (1993) General Assembly would be lower than those for Hamburg (1991).

Dr. Wyrsch felt that it would not be easy to find more income. IUPAC was already the richest of the international scientific unions. The best way to

proceed was to discontinue some of its existing activities. However, Prof. Sheppard commented that IUPAC was almost certainly the most active of the unions. The Secretary General drew attention to Statute 9.42, which could be used positively by IUPAC bodies to solicit additional funds for Union purposes, but to keep the Treasurer (Bureau) informed of what they were doing. Prof. Wermuth proposed to act accordingly, by soliciting money from the pharmaceutical industry to help finance activities of the Medicinal Chemistry Section. Prof. Björkman advised the Bureau that "voluntary contributions" from non-IUPAC sources to the funding of activities of the Union were already at a very high level. Prof. Beck suggested that it might be worthwhile to attempt to quantify the ratio of budget income to voluntary contributions, but the Executive Secretary and others cautioned against such an excercise.

Subject to some amendments by the Treasurer, the Bureau approved the draft budget proposal for immediate implementation by the Division/Section Presidents. Regarding the Guidelines for Handling IUPAC Income and Expenditure, Prof. Björkman pointed out that part of it was included in the draft budget proposal ("Comments" section).

4.4/90 Review of NAO Voting Levels in Council

Prof. Bard had advised the Secretary General (90.06.08), that the US National Committee for IUPAC believed there was an unfairness in the allocation of votes under the current IUPAC votes-subscriptions structure. It asked the Bureau to review the matter.

The Secretary General reminded the Bureau that, prior to the Lyon (1985) General Assembly, a seven-vote level had been suggested, He was personally in favour but, on the advice of the then Chairman of the Finance Committee, no action had been taken. In any case, the Treasurer said that the chemical turnover ranges in the structure now needed revision. The President pointed out that Statute 5.1 would also require to be amended.

The Bureau resolved that:

- (i) in the letter to NAOs about changes to the Statutes and Bylaws for consideration by Council at Hamburg [Minute 3.2.2(i)/90], it should be recommended to replace "(1-6)" by "(1-8)" in Statute 5.1;
- (ii) the Union Officers should draft recommendations on new principles for the IUPAC votes-subscriptions structure, for consideration at the Spring 1991 Executive Committee meeting, and then circulation to the NAOs for decision by Council at Hamburg.

5/90 FUTURE GENERAL ASSEMBLIES AND CONGRESSES

5.1/90 Arrangements for 36th General Assembly (Hamburg: 91.08.07-15)
(Minute 5.1/90, 114th Executive Committee)

The Treasurer presented a comparison of spending to date and estimated for the Lund (1989) and Hamburg Assemblies, from which he judged the financial

situation for Hamburg to be satisfactory. If a person was located at a long distance from Hamburg, he proposed to allow subsistence for only one full travel day, otherwise there would be a half-day travel allowance. Some Bureau Members felt that there would be unfavourable repercussions.

The Deputy Executive Secretary had circulated, for comment, the proposed schedule of meetings to the Union Officers and Division/Section Presidents and the general information material to the Union Officers. She expected to print the information booklet shortly, with the aim of distributing the invitation letters, participation/claim forms, and information booklet before the end of November 1990.

With the unanimous support of the Bureau, the President asked for grateful thanks to be minuted to the FRG-NAO for kindly agreeing to host the 1991 Assembly at such short notice.

As a cost effective measure, the Bureau approved a request for the LLTC Commission on Isotope Specific Measurements to meet at Hamburg immediately prior to the Assembly.

5.2/90 Preliminary Arrangements for 37th General Assembly (Lisbon: 1993)
(Minute 5.3/90, 114th Executive Committee)

The Bureau noted that a Lisbon local organizing committee had now been appointed, with Prof. Fernando Fernandes as the daily contact person. The proposed dates had been amended to 5 th-13 th August 1993 (Minute 5.3/90).

5.3/90 Preliminary Arrangements for 34th Congress (Beijing: 1993)
(Minute 5.4/90, 114th Executive Committee)

In order to avoid an overlap with the Congress and General Assembly of the International Union of Crystallography in Beijing, the President announced the following amended schedule:

5th-13th August 1993 - IUPAC 37th General Assembly, Lisbon 15th-20th August 1993 - IUPAC 34th Congress, Beijing 21st-29th August 1993 - IUCr Congress/General Assembly, Beijing

Prof. Huang apologized for the absence due to ill health of Prof. Guang Xian Xu (Executive President, Chinese Chemical Society). The Congress would be held in the newly constructed International Convention Center complex in Beijing, the venue for the 1990 Asian Games (a video presentation was made by Prof Huang). The Executive Secretary confirmed that the facilities were both extensive and excellent. A detailed scientific programme proposal had been drawn up in conjunction with Dr. Williams, circulated (90.06.30) to the Division/Section Presidents, and their comments included. At Triuggio the Division/Section Presidents [Minute 3.2(iii)/90] had considered that eight sections were probably too many for a Congress of five days, but the consensus was for IUPAC not to ask officially for any shortening of the revised programme.

Bureau Members were invited to submit comments on the scientific programme to

the Chinese Chemical Society by 90.12.31, after which the organizers must finalize it for preparation of the first circular.

5.4/90 Invitations for 38th General Assembly/35th Congress (1995) (Minutes 5.5 and 5.6/90, 114th Executive Committee)

The Secretary General had invited (90.07.06) the NAOs to submit invitations to host the 1995 General Assembly and Congress, mentioning that at Lund a provisional invitation had been received to host the 38th Assembly in UK.

Prof. West reported that Socieded Chilena de Quimíca (with the official approval of the national research council CONICYT) and the Chinese Chemical Society Located in Taipei (possible restrictions on delegates from mainland China) had issued invitations. In addition, the UK Royal Society of Chemistry had confirmed that it was willing to organize the Assembly, with the University of Surrey at Guildford as its first choice of location, and the University of Kent at Canterbury as second choice.

The invitation from the Chinese Chemical Society Located in Taipei included both the Assembly and the Congress. Also, there was an invitation from the Czechoslovak National Committee for Pure and Applied Chemistry for the Congresss to be in Prague (held there previously in 1967).

The Bureau asked the Secretary General to evaluate the various invitations and to make recommendations to the Executive Committee (Bureau).

6/90 RESTRUCTURING OF IUPAC

Prof. den Boef elaborated briefly on his late paper, dealing with five aspects of the restructuring of the Union. He was concerned especially that the core activities should indeed remain the "core" work of IUPAC. He appreciated that comments from the higher level of the Union could be very stimulating, but he considered that Divisions were being asked to restructure too often. Prof. Fluck had agreed with these views at the meeting of Division/Section Presidents in Triuggio (Minute 3.3/90). Prof. Jeannin said that the late paper was an interesting document, and it should come forward for further consideration at the next meeting of the Executive Committee.

Report on Chemistry and the Environment Programme (CEP) (Minute 6.1/90, 114th Executive Committee)

The Secretary General reported on the meeting of CCCEP at Triuggio (90.09.22), which he had chaired in the absence of Prof. Koptyug. The Chemistry and the Environment: The IUPAC Programme booklet had been distributed widely within the Union, copies sent to recent IUPAC-sponsored symposia, and numerous requests for copies from Affiliates serviced. Dr. Good was very positive to the format, speed of publication, and impact of the booklet, which more than compensated for some deficiencies of content and presentation. The Information Officer stressed that the draft booklet had been circulated for IUPAC comment prior to and at Lund. When Prof. Koptyug had finalized his Compilative Information on International Organizations and Programmes related to Chemical

and Biochemical Aspects of Environmental Problems, publication was recommended in PAC, so that offprints could be provided. Arrangements had been made for Prof. Koptyug to reopen discussions on cooperation with UNEP and ICSU-SCOPE, but it might now be necessary for other IUPAC persons to deputize for him.

All CEP-Subcoordinators (except for Prof. M. Chastrette/Education and Prof. J.M. Thomas/CHEMRAWN, who were not present) had reported positively at Triuggio. Some of their Groups would meet immediately prior to Hamburg, so that Commissions could discuss progress during the Assembly itself. Prof. Jeannin confirmed that the 1st IUPAC Workshop on Safety in Chemical Production (Basel, 90.09.09-13) was highly successful. A second Workshop was planned for Yokohama, Japan, in Spring 1993, dealing more with environmental aspects of the subject, after which other Workshops would be organized in developing countries. Recommendations had been reached on further financial allocations for environmental projects (from the USD 75 000 from assets already confirmed by the Treasurer), subject to approval by Prof. Koptyug by 90.10.31, otherwise by the IUPAC Officers.

Dr. Wyrsch drew attention to a suggestion from UNIDO to establish, with IUPAC involvement, safety teaching centres throughout the developing world. Also, he enquired about the extent of IUPAC participation in IGBP, which was acknowledged so far to be poor. The Secretary General said that ICSU had, in fact, developed IGBP with much greater involvement from ICSU member countries than from its member scientific unions. Prof. West emphasized that so far earth chemists/scientists were the most significant participants in IGBP. He reminded the Bureau that he had repeatedly tried to persuade the previous Division Presidents to volunteer participation from IUPAC, but without success. According to Dr. Good one of the consequences was regrettably, that IUPAC recommendations on nomenclature and symbols were apparently not being used, which would eventually give rise to problems. The President indicated that various documention, which he had acquired at the recent 2nd IGBP Scientific Advisory Council Meeting, had been passed via Prof. Zamaraev to Prof. Koptyug at Triuggio.

6.2/90 Report on Chemistry and Advanced Materials Programme (CAMP)

(Minute 6.2/90, 114th Executive Committee: Prof. Rao in attendance)

Prof. Rao reported on the meeting of CCCAMP at Triuggio (90.09.22). Some of the proposed initial activities were to produce urgently an inventory similar to that for CEP, to produce a monograph on advanced materials, and to organize a few workshops/symposia on the chemistry of materials, including one with CTC.

It was recommended that the Interdivisional Ad Hoc Committee on Solid State Chemistry (approved by Council at Lund: 35th Meeting - Agenda Item 14) should be dissolved. In addition, the following composition was recommended for the Coordinating Committee on Chemistry and Advanced Materials Programme (CCCAMP):

Prof.C.N.R. Rao Prof. B. Delmon

- Chief Coordinator
- Coordinator for Physical Chemistry Division (Belgium was not presently a Member country of the Union)

Prof. R. Metselaar

Dr. D.F. Eaton

Prof. J. Economy

- Coordinator for Inorganic Chemistry Division

- Coordinator for Organic Chemistry Division

- Coordinator for Macromolecular Division

- Coordinator for Analytical Chemistry Division

Representative from CTC

Representative from COCI

Representative from CHEMRAWN Committee

1-2 prominent persons from outside the Union from the advanced materials/solid-state chemistry field

Although there was some concern at such a large membership, especially the need for experts from outside the Union, the Bureau approved the recommended composition for one year. Also, the Bureau approved the dissolution of the Interdivisional Ad Hoc Committee. Prof. Rao hoped to have all the names for membership of CCCAMP by 90.11.30. He could then judge if a meeting was necessary before Hamburg. As with CEP, financial provision from the IUPAC assets would be required for CAMP.

6.3/90 Feasibility Report on Chemistry and Biosciences/Biotechnology Programme [Minute 22.1(iii)/89, 58th Bureau]

Prof. Wadsö referred to the 1988 report of the Study Group on Chemistry and the Biosciences [Appendix A (page 3) to 56th Bureau - Oxford], in which significant projects were identified in the Physical, Macromolecular, Analytical, Applied and Clinical Chemistry Divisions. At that time there was little relevant activity in the Inorganic and surprisingly in the Organic Chemistry Divisions, but the Medicinal Chemistry Section was wholly relevant. A major problem was the existence of several overlapping international scientific unions (e.g., IUB, IUBS, IUPAB) and ICSU scientific committees (e.g., COBIOTECH, COGENE). Various conclusions and recommendations were made in the 1988 report, but no action had been taken, pending the outcome of the major discussions on restructuring of IUPAC. Prof. Wadsö felt that the key to progress was through extensive cross collaboration, via appointed representatives to relevant IUPAC and external bodies, with the situation being monitored through a small (three persons) Coordinating Committee on Chemistry and Biosciences/Biotechnology Programme.

After an extensive discussion, involving several Bureau Members, the President concluded that there was no consensus yet within IUPAC on how the Programme should proceed. Therefore, he invited Prof. West to try and arrange a meeting during the forthcoming ICSU General Assembly in Sofia, in order to try and initiate some dialogue with the Secretaries General of the bio-unions. Also, he asked Prof. Wadsö to draft an IUPAC biosciences/biotechnology inventory similar to that for CEP.

7/90 AFFILIATE MEMBERSHIP PROGRAMME

7.1/90 IUPAC Component of Affiliate Subscription for 1989 (Minute 2.2.1/90, 114th Executive Committee)

The Secretary General drew attention to the precirculated report, prepared by

the Affiliate Affairs Secretary in conjunction with the Executive Secretary. Clearly, the IUPAC component of the Affiliate subscription was sufficient to cover the costs in 1989. Dr. Williams anticipated that, in January 1991, when the necessary data became available from the new computerized accounting system at the Secretariat, the 1990 income/expenditure per Affiliate could be calculated. It would then be possible for the IUPAC Officers/Executive Committee to reach better agreement on the IUPAC component of the Affiliate subscription for 1992.

Prof. Modena suggested that the IUPAC subsidy for Affiliates in developing countries (approximately 500 Affiliates at USD 11 each) should be omitted in making the evaluation for 1990.

7.2/90 Report of Committee on Affiliate Membership (Minute 7.5/90, 114th Executive Committee)

The Secretary General reminded the Bureau of the background, which had led to launching of the Affiliate Membership Scheme in 1986. Since Lund it had been redesignated as the Affiliate Membership Programme, and the Committee on Affiliate Membership (CAM) — an AMP Advisory Group formed from within the Bureau itself — had held its inaugural meeting at Triuggio.

Dr. Freemantle drew attention to the proposed composition/terms of office and terms of reference for CAM (Appendix A). It was envisaged that CAM would meet annually in conjunction with the Bureau. The aims of AMP were to maximize the participation of chemists worldwide in the affairs of IUPAC, and to disseminate information about the Union more widely. Dissemination was being achieved by the provision of CI to Affiliates. However, their recruitment into membership of Commissions was so far disappointing. Some national chemical societies, especially in Europe, needed to increase their promotion of AMP, so that more Affiliates were recruited.

Prof. West said that some additional benefits and incentives had been considered by CAM at Triuggio, e.g., an improved welcoming package (with membership card), a requirement for 10% of the membership of all Divisions/Sections to be Affiliates below the age of 40. The improved welcoming package was recommended enthusiastically by CAM, as a means not only of enhancing the attraction of the Programme, but also because it would increase the dissemination of IUPAC information to interested chemists.

The Secretary General was unable to say if Affiliates largely remained in the Programme for the following year, or whether mostly new Affiliates were being added each year. This was because CI was sent in bulk to some countries for dispatch to their Affiliates, whose names might never be known to the Union. However, he pointed out that only about half of the Bureau Members were Affiliates.

7.3/90 East European Bank Accounts

The Treasurer drew attention to precirculated and tabled correspondence, concerning payment in 1991 of Affiliate subscriptions, particularly from Czechoslovakia and Poland. Due to the sudden high inflation in these

countries, payment in national currency into East European banks was now leading to loss in value for IUPAC. Also, too much administration was required from the Union. It was suggested that, for the IUPAC component of USD 12, a maximum of 150 Affiliates in Poland should be "subsidized" to an extent of USD 7, and USD 5 for each Affiliate should be paid in US-dollars to IUPAC. By moving progressively towards full payment in hard currency, Prof. Björkman hoped to eliminate the IUPAC bank accounts in East Europe as soon as possible.

8/90 IUPAC BODIES

8.1/90 Reports of Division/Section Presidents on Activities since Lund

The reports (Statute 5.406) had been precirculated, and they were taken by Prof. Jeannin as having been read by all Bureau Members before coming to Triuggio. Each Division/Section President was allowed briefly to mention to the Bureau the highlights or any new points.

8.2/90 Vice-Presidential Critical Assessment of IUPAC Projects and Programmes

Despite doubts expressed about the continued need for a biennial critical assessment, Prof. Bard was strongly in its favour from the point of view of the Vice-President (incoming President) of the Union. The present document was a first draft, which would be revised after his individual interviews with the Division/Section Presidents at Triuggio.

His preliminary conclusions were that:

- (i) Some reports and projects did not seem appropriate for IUPAC sponsorship or publication in PAC.
- (ii) It would be helpful, if priorities were established within the various IUPAC bodies among their different projects.
- (iii) The balance between different areas of chemistry within IUPAC should be examined.
- (iv) In order to obtain input on important new issues needing attention, IUPAC should conduct an annual survey of opinion outside the Union.
- (v) The Union should investigate the possibility of using new technologies, in order to make IUPAC reports and recommendations available in forms which were more convenient to use and store, and which could ensure wider distribution, perhaps at lower cost.

Prof. Jeannin congratulated the Vice-President on his draft document, and he expressed support for continuation of the biennial critical assessment. Prof. Sheppard also congratulated Prof. Bard but, in his opinion

- critical data evaluations were a valuable aspect of IUPAC work

- it was logistically difficult at a General Assembly for a Division/Section Committee to evaluate properly any recommendations from outside on important new issues needing attention (defer action for one year, while a definite proposal was submitted and considered?)
- there was some danger in IUPAC making recommendations on nomenclature and symbols too early for new "hot spots" areas, because they might lead to controversy (they might be better labelled as "preliminary proposals" for discussion only and not for reference?)

Prof. Schneider pointed out that, when the Vice-President saw them for his critical assessment, project initiation/progress forms were several months out of date. Also, problems arose when a project coordinator completed his/her term of service before the camera-ready copy report was prepared for publication in PAC: the long waiting period, particularly during approval processes for a nomenclature/symbols document, inevitably decreased the original enthusiasm for a project. Attention was drawn to some suggestions from Prof. G. Gritzner (Chairman, Commission on Electrochemistry) to ensure more rapid publication in PAC. Prof. Jeannin proposed that these suggestions should be referred to IDCNS. Prof. Sheppard reacted positively, but he stressed that it would still take 1.5-2 years to complete the two-stage consideration by IDCNS. Also, Prof. Jeannin said that the information on project initiation/progress forms could be updated by a Division/Section President at the interview with the Vice-President.

The Executive Secretary reminded the Bureau of the recommendation of Past-President W.G. Schneider, namely that a feasibility study should always be first undertaken for each proposed new IUPAC project. Such a study should determine how much work might be involved and the time needed to complete it, plus the financial consequences for the Union. Only then should a project be approved officially by the Division/Section President. Prof. Heitz mentioned that he had rejected some project proposals from his Commissions at Lund.

In order to mimimize loss of momentum by having to work subsequently via correspondence, Prof. Zamaraev strongly favoured the financing of an extra day at the end of a General Assembly in order to facilitate Division Committee-Commission interactions.

Prof. Modena said that, unfortunately it was possible for an IUPAC body, like the former Commission on Medicinal Chemistry, to resist for several years pressure from higher authorities of the Union for change.

Prof. Jortner congratulated Prof. Bard on this significant document. He doubted whether cold fusion should have been included by Prof. Bard as a frontier area, in which IUPAC might have become involved. The publication procedure adopted at the initiation of this research area did not follow accepted norms of scientific publication. Furthermore, he wondered if norms and standards for scientific publications was a subject which should be considered by IUPAC.

Prof. Wadsö supported Prof. Sheppard's view, that critical data evaluations were a valuable IUPAC activity. Prof. Bard indicated that his main concern was, in fact, about a single person collecting data without any critical evaluation.

The Treasurer re-emphasized the remarks of President Jeannin to the Division/Section Presidents at Triuggio (Minute 1/90), namely that it was essential for them to evaluate critically and discontinue some traditional Division projects. For financial reasons it would otherwise be impossible to start new activities. Personally, he would like to see greater recognition of the concept of Limited Life Time Commissions. He advocated that some existing Commissions should be converted to LLTC status and have less Titular Members.

8.3/90 Ratification of Memberships Approved by Correspondence

The following appointments, made through correspondence by the President since the 114th Executive Committee meeting, were ratified by the Bureau:

Committee on Publications

Dr. E.D. Becker (USA)

- Re-appointment as Chairman and Member (1991-1994)

Commission on Water Chemistry

Prof. M. Ewald (France)

- Associate Member (1989-1993)

8.4/90 Nominations of New Members

(i) The Bureau approved the following appointments:

Commission on Functional Polymers

Prof. T. Shimidzu (Japan)

- Chairman and Titular Member

(1989-1993)

Prof. W.J. Koros (USA)

- Titular Member (1989-1993)

Dr. L.F. Charbonneau (USA)

- Titular Member (1989-1993)

Commission on Agrochemicals

Dr. E. Dorn (FRG)

- Chairman and Titular Member (1989-1993), following resignation of Dr. R.J. Hemingway

Commission on Biotechnology in Clinical Chemistry

Dr. Sophia Visvikis (Greece)

- Titular Member (1989-1993)

Dr. N. Gregersen (Denmark)

- Associate Member (1989-1993)

- (ii) Subject to Prof. den Boef ascertaining the reason for Prof. O. Yamauchi being replaced, the Bureau approved the appointment of Dr. T. Kiss (Hungary) from 91.01.01 as Secretary for the Commission on Equilibrium Data.
- (iii) The President informed the Bureau, that Prof. M. Chastrette would complete his period of service on CTC at the end of 1990. Prof. Jeannin hoped shortly to appoint a new Chairman.

8.5/90 <u>Macromolecular Division Rules</u> (Minute 7.3/90, 114th Executive Committee)

In reviewing the matter, the Secretary General emphasized that the IUPAC Officers were concerned to facilitate the functioning of the Macromolecular Division, but it must be within the Statutes and Bylaws of the Union. There was no difficulty in allowing Coopted Members for a Division Committee, but allocating voting rights (except perhaps on scientific matters) to them was unconstitutional. It was irrelevant that Coopted Members were no financial burden to the Union. At present there were eight ordinary Members on the Macromolecular Division Committee (all endorsed by their respective NAOs) plus thirteen Coopted Members (endorsement not required by their NAOs). This situation could lead to the ordinary Members being outvoted. The revised proposals (90.07.27) of the Division Secretary, Prof. A.D. Jenkins, were an improvement. However, if each NAO was invited to nominate a National Representative, it could lead to a Division Committee of nearly seventy persons.

Personally, he now preferred the "ordinary" Members to be known as "elected" Members, and he was opposed to the election of Coopted Members. Until the President/Bureau gave a policy ruling on the matter, the Executive Secretary and Prof. West were unable to draft a revised text for the Macromolecular Division Rules. Meanwhile, consideration should be deferred of a letter from the Czechoslovak-NAO (90.08.15), advocating associated changes to the Statutes and Bylaws.

After several Bureau Members had commented on the matter, the President concluded that the mechanism of working of the Macromolecular Division should be respected as far as possible, but within the existing Statutes and Bylaws of the Union. Accordingly, the Officers would prepare a proposal for consideration not later than the Bureau meeting at Hamburg. Meanwhile, the Macromolecular Division should plan to hold its next elections in accordance with its usual practice.

8.6/90 Minutes of 1990 Committee on Chemical Databases Meeting

The Minutes of the meeting at Bolzano (90.06.01) were recorded as having been received officially by the Bureau. Dr. Good observed that, in future, it was preferable for CCDB to use the facilities of a non-publisher organization for its meetings (Minute 15).

8.6.1/90 Proposed IUPAC Policy for Software and Data Form (Minute 6)

The President elaborated briefly on problems encountered in setting up a stability constants database and involving Dr. L. G. Pettit, former Chairman of the Commission on Equilibrium Data. It was now impossible for IUPAC to insist that the considerable work carried out using Fortran should be redone. However, the Bureau approved Prof. Jeannin's recommendation, that IUPAC should henceforth adopt the CCDB policy proposal to have dBASE III as the retrieval software and the data in ASCII format. This would make IUPAC database projects economical and the data easily transferable to other computers.

Dr. Good and Prof. Jeannin drew attention to the fact that the Macintosh computer (with software similar to dBASE III) was now being used by many people, and that CCDB would be exploring Macintosh versions of IUPAC databases (Minute 7).

8.6.2/90 EXPERIDAT (Minute 7/89, 57th Bureau)

The Bureau noted that CCDB had given further consideration to the practicability of establishing a central databank for all new experimental data (EXPERIDAT). Indexing was to be done by the author himself instead of by the database producer. The problem was that the programme was very complex (Minute 11). Nevertheless, Prof. Fluck said that EXPERIDAT would proceed.

8.7/90 Minutes of 1990 CHEMRAWN Meeting

The Minutes of the meeting at Warsaw (90.05.02-04) were recorded as having been received officially by the Bureau.

8.7.1/90 Proposal for CHEMRAWN Conference on Education

CTC had proposed that there should be a CHEMRAWN Conference on Chemical Education, which might embrace media aspects and the public understanding of chemical research applied to world needs. Prof. Modena felt that it might be difficult to finance such a theme. The consensus opinion of the Bureau was that chemical education was not strictly within the terms of reference of CHEMRAWN. Before reaching a decision, the Bureau requested the provision of a summary of exactly which topics might be covered.

8.7.2/90 Membership

The Bureau approved a request that, for exceptional reasons, the periods of membership of Prof. J.B. Donnet (continuation of liaison with COCI on chemical safety following the recent workshop at Basel) and Dr. R. Pariser (planning and execution of CHEMRAWN VII) should be extended for a maximum of two years to the end of 1992.

8.7.3/90 Finance (Minute 4.3.1/90, 114th Executive Committee)

The Treasurer drew attention to the agreement of the CHEMRAWN Committee, that the organizers of CHEMRAWN VII should budget to repay the seed money of USD 12 500 from the Rolling Fund times an interest factor of 1.2 and, if possible, also produce a surplus of USD 25 000.

8.8/90 1990 Meeting of Committee on Teaching of Chemistry [Minute 6(v)/89, 112th Executive Committee - Lisbon]

The Summary Minutes of the meeting at Moscow (90.09.03-04) were recorded as having been received officially by the Bureau. Prof. Jeannin noted with regret that, despite the provision of additional funding to enable the Divisional/Sectional Members to participate, the arrangements were circulated too late for most of them to be present.

9/90 RELATIONS WITH OTHER ORGANIZATIONS

9.1/90 Chemical Society of the South Pacific (Minute 8.1/90, 114th Executive Committee)

The Society had confirmed that its application for Observer Country status of the Union should be changed to Associated Organization status. The Bureau agreed to recommend Council to accept the application at Hamburg.

9.2/90 Belgian Membership of IUPAC (Minute 8.2/90, 114th Executive Committee)

The Bureau noted that the outstanding subscriptions for 1985 and 1988 from Belgium had recently been received (90.08.23), the subscription for 1989 having been paid on 90.03.28. Despite the Treasurer having issued an invoice for 1990, the Bureau decided to await an official written request from Belgium to rejoin the Union.

9.3/90 ICSU Matters

9.3.1/90 <u>IUPAC Annual Subscription</u> (Minute 4.2.3/90, 114th Executive Committee)

The Secretary General outlined the new ICSU grants procedure for 1991 and 1992, as circulated on 90.05.18. IUPAC would receive USD 26 100 for 1991 (and provisionally USD 27 000 for 1992), provided that it submitted to ICSU details of up to three activities for which IUPAC planned to use this sum. He had consulted the Division/Section Presidents accordingly, and duly made a submission to ICSU. IUPAC would still have to pay an annual subscription to ICSU (presently 2.5% of the national income from IUPAC member countries).

Dr. Good observed that the new procedure would obviously affect the future budgets of the Union. Each Division/Section President should plan accordingly, especially as the deadline for 1992 grants submission was 91.02.15. The Bureau left it to the judgement of Prof. West how to act, should any of the three IUPAC activities submitted for 1991 not be accepted by ICSU and IUPAC income thereby lost. Several Bureau Members criticized the new procedure, but the Secretary General stressed that it was essential for IUPAC to remain a member union of ICSU. There was otherwise a danger that some IUPAC-NAOs would no longer fund IUPAC.

9.3.2/90 ICSU Scientific Committee for Biotechnology (Minute 8.5.2/90, 114th Executive Committee)

The Secretary General referred to the tabled report (90.07.23) from the official representative of IUPAC, Dr. J.L. Fox, at the 4th ICSU-COBIOTECH General Assembly (Copenhagen, 90.07.13-14). The strong position taken by IUPAC had ensured that Dr. Fox was appointed to the COBIOTECH Steering Committee, though IUPAC did not have such a statutory position in the revised COBIOTECH constitution. The Bureau approved Prof. West's recommendation that, for the present, IUPAC should retain its involvement in COBIOTECH.

9.3.3/90 ICSU Request for Funding from UN Development Programme (Minute 8.5.3/90, 114th Executive Committee)

The Secretary General regretted that there was still no official news from UNDP about the status of the ICSU submission (90.01.05).

9.3.4/90 Proposed Reduction in Frequency of ICSU General Assemblies

The Secretary General elaborated briefly on his concerns for unions such as IUPAC, which operated on a biennial cycle, should ICSU adopt a triennial frequency at its forthcoming General Assembly. Prof. Sheppard agreed that IUPAC still needed a biennial General Assembly as a focus for its scientific activities. The Bureau supported these views for presentation by Prof. West at Sofia.

9.3.5/90 Natural Disasters

The Secretary General drew the attention of the Bureau to the International Decade of Natural Disaster Reduction (IDNDR), as proclaimed by the United Nations and having commenced on 90.01.01. At Sofia ICSU might establish a Special Committee on IDNDR, but it was not yet clear if IUPAC had a definite role to play.

9.4/90 <u>IUPAC-IUPAP Transfermium Working Group</u> (Minute 8.8/90, 114th Executive Committee)

On the recommendation of President Jeannin, the precirculated Phase (i) report of the Working Group - Criteria That Must Be Satisfied For The Discovery Of A New Chemical Element To Be Recognized - was endorsed by the Bureau and approved for publication in PAC. IUPAP still had to approve the Report and to identify an appropriate international physics journal for simultaneous publication. A request from Prof. G.N. Flerov was under consideration by the Working Group, for publication of an article on the history of "discovery" of the transfermium elements.

9.5/90 General Considerations for Appointment of Official Representatives on Other Organizations (Minute 8.9/90, 114th Executive Committee)

The Secretary General stated his conviction that ICSU was, in effect, moving increasingly towards its former status as an international research council. He had expressed this concern in writing to the ICSU Executive Secretary in connection with COBIOTECH. More recently, Prof. West had discovered that the ICSU Commission on Application of Science to Agriculture, Forestry and Aquaculture (CASAFA) was moving towards a COBIOTECH-type situation. Therefore, it was vital for IUPAC's official representatives to ICSU bodies, in particular, to report back in more detail than at present.

Prof. West's precirculated position paper on the matter made nine recommendations/suggestions for consideration by the Bureau. Ten ICSU bodies were involved, so that it did constitute an additional strain on the higher

authorities of IUPAC. However, in their Presidential reports to Council on the State of the Union, both Prof Rao and Prof. Koptyug had emphasized the need for greater involvement of IUPAC in the activities of ICSU. Prof. Wadsö pointed out that it provided an opportunity to promote chemistry to the other international scientific unions.

The Bureau unanimously approved the recommendations/suggestions of the Secretary General. Prof. Bard said that he would appreciate some discussion with Prof. West by the time of the next Executive Committee meeting, concerning the appointment of representatives to ICSU bodies. Prof. Wadsö indicated that, since the recent reorganization of the ICSU Committee on Science and Technology in Developing Countries (COSTED), he had not yet found how to involve as the official representative of IUPAC.

9.6/90 Brazilian Chemistry Committee for IUPAC (Minute 8.10/90, 114th Executive Committee)

The Bureau noted that, as directed by the Executive Committee, Dr. Williams had advised the Executive Secretary of BCC (90.04.29, with reminder on 90.08.15) to conduct a postal consultation with the four constituent societies, in order to reach a decision about appointment of the two Brazilian chemists nominated at Lund for membership of IUPAC bodies. No reply had so far been received. Sociedade Brasileira de Química was now receiving a duplicate set of IUPAC documentation, and it had again asked for a meeting of BCC to be convened.

The Bureau agreed that President Jeannin should write officially to BCC, confirming that IUPAC was prepared to accept the nominations of Prof. M.A. Kaplan and Dr. T. Tavares, provided that BCC conducted the postal ballot to obtain full endorsement of the NAO. Prof. West asked that the need should be mentioned for BCC actually to meet, otherwise how could Brazil possibly consider hosting the 1997 IUPAC General Assembly and Congress (Item 25, 35th Council - Lund).

9.7/90 Romanian Membership of IUPAC

The Treasurer had been informed by Prof. C.I. Simionescu (90.04.07), that Romania might shortly wish to resume its activity in IUPAC. The Bureau accepted Prof. Björkman's recommendation that, when an official written request was received from Romania to rejoin the Union, it would not be required to clear the outstanding subscriptions for 1986-8 (already written off by withdrawls from IUPAC provisions for bad debts).

9.8/90 Consequences for IUPAC of Reunification of FRG and GDR

Noting that GDR was to be reunified with FRG on 90.10.03, the Treasurer was asked to contact the FRG-NAO about the consequences for the national subscription to IUPAC in 1991. Furthermore, the Bureau agreed that, after the present appointments of National Representatives from FRG and GDR terminated at Hamburg [Bylaw 4.305(i)], it would only be possible to have one NR from Germany on each IUPAC body, such a decision to be made by the German NAO.

10/90 PUBLICATIONS

10.1/90 Minutes of 1990 Publications Committee Meeting

The Minutes of the meeting at Oxford (90.06.25-27) were recorded as having been received officially by the Bureau.

10.1.1/90 Student-oriented Nomenclature Book (Minute 2.1/90)

The President spoke in support of the proposal to develop a simplified and student-oriented guide to IUPAC recommendations. However, he was uncertain of the need to convene a preliminary meeting of a task group under the Chairmanship of Prof. C.J.H. Schutte before Hamburg. Several Members of the Bureau felt that it was more important for Prof. Schutte first to produce a contents list for approval by the relevant Divisions, then for him to proceed alone in drafting the text. Prof. Sheppard reported that IDCNS had suggested any IUPAC publication should base itself on the UK Association for Science Education booklet Chemical Nomenclature, Symbols and Terminology for Use in School Science (1985). Prof. Schneider observed that it was essential to convince university teachers to use and promulgate IUPAC recommendations. Prof. Jeannin agreed to communicate the views of the Bureau to Prof. Schutte.

10.1.2/90 Status of Database of IUPAC Reports (Minute 3/90)

Several Bureau Members expressed strong support for the provision by the Union of USD 20 000 for dissemination of the database as proposed by the Publications Committee. It was felt to be an excellent use of such money to publicize IUPAC reports. The Bureau unanimously approved the proposal, in principle, and left it for Prof. Björkman to decide how best to act on the basis of more detailed information from the Publications Committee.

10.1.3/90 Monographs on Chemistry for the 21st Century (Minute 4.4/90)

Prof. Zamaraev explained how the original idea had developed since the 1988 meeting of the Bureau, and he outlined the present status of monographs in preparation. The Publications Committee, which was now responsible for the monographs, had proposed that there should be a broadly-based Monographs Editorial Advisory Board, analogous to the Boards for PAC and CI.

There were some reservations about the need for and effectiveness of a Monographs Editorial Advisory Board. However, the Bureau eventually agreed that a Board should be appointed until the 1993 General Assembly, when its effectiveness should be reviewed. The Board should meet only at a General Assembly, and be comprised of a member from each Division/Section plus representatives from COCI and possibly CTC. Initially, all members should be from within the Union. Prof. Zamaraev confirmed that, at present, the monographs were not being reviewed prior to publication. The contents of each monograph were the responsibility of the coordinating editor(s).

10.1.4/90 Changes in Prices of Publications

The Bureau confirmed that, as an advisory body, the Publications Committee

should make its recommendations on changes in prices of IUPAC publications to the President/Executive Committee (Bureau) before communicating with the publisher. Should an urgent decision be required, this should be by consultation with the President by telephone/telex/fax or letter.

Various changes in prices of IUPAC publications with Blackwell Scientific Publications and Pergamon Press (see Appendix B) were endorsed retrospectively by the Bureau.

10.2/90 IUPAC Handbook 1989-1991 (Minute 9.3/90, 114th Executive Committee)

The President congratulated the Deputy Executive Secretary on producing the new Handbook earlier than that from Boston, despite poor working conditions at the start of the year in the Secretariat and shortage of staff since Lund. Depending on the pound sterling/US-dollar exchange rate, the costs should be within the financial provision of USD 16 050.

The Bureau ratified various changes to Standing Orders from the Executive Committee, which were included in the new Handbook (Appendix C).

10.3/90 Catalogue of Currently Available IUPAC Publications (Minute 14.5/89, 57th Bureau)

The Information Officer regretted that, due to other priorities since Lund, no progress had been made in finalizing the draft catalogue. Furthermore, much of the material was now out of date in respect of prices. The Secretary General agreed that the catalogue should continue to be accorded low priority, while efforts were concentrated on the advanced materials inventory (Minute 6.2/90), etc.

10.4/90 IUPAC-IPCS/WHO Monograph on Safe Use and Disposal of Chemicals in Laboratories (Minute 14.6/89, 57th Bureau)

The President reported that problems concerning the world rights of the monograph had considerably delayed progress since Lund. However, the problems were now solved, and a revised publishing agreement was expected shortly between IUPAC and WHO's International Programme on Chemical Safety with Cambridge University Press (UK).

11/90 SPONSORSHIP OF SYMPOSIA

11.1/90 Ratification of IUPAC Sponsorship of Symposia

The sponsorships of symposia (Appendix D), approved through correspondence by the Secretary General on behalf of the President since the 114th Executive Committee meeting, were ratified by the Bureau.

11.2/90 Ratification of Official Representatives to IUPAC-sponsored Symposia

The following appointments of official representatives of IUPAC to its sponsored symposia, as made on behalf of the President since the 114th Executive Committee meeting, were ratified by the Bureau:

9th International Symposium on Carotenoids
Kyoto, Japan: 20th-25th May 1990

LETTER OF GREETINGS (Prof. B.L.C. Weedon unable to attend due to ill health)

14th International Conference on Organometallic Chemistry Detroit/Michigan, USA: 19th-24th August 1990

LETTER OF GREETINGS

19th Latin American Chemical Congress
Buenos Aires, Argentina: 5th-9th November 1990
Prof. Sir DEREK BARTON

Polymer 91: International Symposium on Preparation, Characterization and Properties of Polymer Materials
Melbourne, Australia: 10th-15th February 1991
Prof. A.D. JENKINS

12/90 REPORT ON SECRETARIAT (Minute 11/90, 114th Executive Committee)

The Secretary General referred briefly to the problems encountered in 1989 and earlier this year, which were now largely overcome. Some aspects of further refurbishment of the Secretariat were to be discussed with his fellow Officers at Triuggio, and the 1990 annual staff inspection had been deferred to the end of the year. The President asked for the official thanks of the Bureau to be minuted to the Secretariat staff for its continued good work for the Union.

13/90 DATES AND PLACE OF NEXT BUREAU MEETINGS

The next meetings were confirmed for Hamburg on 91.08.12-13 ('old' Bureau) and 91.08.15 ('new' Bureau) during the 36th General Assembly.

14/90 ANY OTHER BUSINESS

14.1/90 1995 General Assembly and Congress

The Executive Secretary reported that an invitation had just been received from the Turkish Chemical Society to host both meetings. The Bureau asked the Secretary General to include it in his evaluation of the other invitations received (Minute 5.4/90).

14.2/90 Commission on Water Chemistry

Noting that the support of the President of the Applied Chemistry Division and the Czechoslovak-NAO had already been obtained, the Bureau approved the nominations of Dr. P. Dolejs and Prof. P. Pitter as new Associate Members.

VOTES OF THANKS

Votes of thanks were recorded to Profs. Montalbetti and Modena for the local organization and provision of facilities/hospitality and to the Executive Secretary for his continuing good service to the Union.

CHAIRMAN: January 1221

APPENDIX A

COMMITTEE ON AFFILIATE MEMBERSHIP (CAM)

Composition and Terms of Office

- (i) There shall be a Committee on Affiliate Membership, composed of a Chairman and six other Members of the Bureau. The Affiliate Affairs Secretary shall act as Secretary.
- (ii) The President in consultation with the Executive Committee shall appoint the Chairman and the six other Members of the Bureau.
- (iii) The periods of service of the Chairman and the Members shall be concurrent with their service on the Bureau.

Terms of Reference

(i) To advise the President and the Executive Committee on all matters

concerning the Affiliate Membership Programme (AMP).

(ii) To review the operation of AMP at least annually.

(iii) To make recommendations for improving and promoting AMP and its benefits to Affiliate Members.

* * * * * *

APPENDIX B

PRICE RECOMMENDATIONS FOR IUPAC-BSP PUBLICATIONS (see 1990 Publications Committee Minutes)

Minute 2.2/90, page 3 - Inexpensive Reprinting of Nomenclature/Symbols Books in India

Minute 4.3.3/90, page 7 - Hardcover and Flexicover Versions of Purple Book and letter from BSP (90.09.17)

Minute 5.3/90, page 9 - PAC in 1991

Minute 5.6/90, page 10 - Symposium Editors' Honorarium and Camera-ready Typing Fees

Minute 9.3/90, page 12 - CI in 1991

PRICE RECOMMENDATIONS FOR IUPAC-SOLUBILITY DATA SERIES IN 1991

Letter from Pergamon Press/Mr. K. Lambert (90.08.23)

Standing Orders from Executive Committee

* CHEMRAWN COMMITTEE

Composition and Terms of Office

- (i) There shall be a standing CHEMRAWN Committee, composed of a Chairman, a Secretary, six regular Members, and up to six Associate Members. In addition, the Treasurer shall be an ex officio Member, but without voting power.
- (ii) The President in consultation with the Executive Committee shall appoint the Members and the Associate Members. The CHEMRAWN Committee may propose names of persons suitably qualified for appointment.
- (iii) The period of service of a regular Member and of an Associate Member shall be four years, renewable for a further term of four years.
- (iv) The Membership shall be reviewed every two years by the incoming President in consultation with the Executive Committee.
- (v) The President in consultation with the Executive Committee shall appoint the Chairman and the Secretary. The CHEMRAWN Committee may propose candidates.
- (vi) The period of service of the Chairman and of the Secretary shall not exceed eight years. The sum of the years of service as a regular Member or an Associate Member and as the Chairman or the Secretary shall not exceed ten years.

Terms of Reference

On behalf of the President and the Executive Committee:

- (i) to identify human needs amenable to solution through chemistry with particular attention to those areas of global or multinational interest,
- (ii) to serve as an international body and forum for the gathering, discussion, advancement, and dissemination of chemical knowledge deemed useful for the improvement of man and his environment,
- (iii) to serve as an international, nongovernmental source of advice for the benefit of governments and international agencies with respect to chemistry and its application to world needs,

and to be responsible for organizing IUPAC activities in these areas as approved by the President and the Executive Committee. The Treasurer is to be kept informed through plans, budgets, and audited accounts, of activities which have financial implications. Payments from IUPAC funds must be approved by the Treasurer.

* CHEMRAWN = CHEMical Research Applied to World Needs

Minufe 2.6.3/89, 112/R Executive Committee - Lisbon

COMMITTEE ON CHEMICAL DATABASES (CCDB)

Composition and Terms of Office

(i) There shall be a standing Committee on Chemical Databases, composed of a Chairman, a Secretary mondainers, and phrey other Members, and up to four Associate Members

(ii) The President in consultation with the Executive Committee shall appoint the Membersy The Committee on Chemical Databases may propose names of persons suitably qualified for appointment.

and the Associate Members.

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- (iii) The period of service shall be four years, renewable for a further term of four years.
- (iv) The Membership shall be reviewed every two years by the incoming President in consultation with the Executive Committee.
- (v) The President in consultation with the Executive Committee shall appoint the Chairman and the Secretary (Chairman). The Committee on Chemical Databases may propose candidates.
- (vi) The period of service of the Chairman and of the Secretary Mantiportal shall be four years, renewable for a further term of four years. The sum of the years of service as a Member and as the Chairman or the Secretary Mantiportal shall not exceed ten years.

 Associate Member

Terms of Reference

- (i) To advise the President and Executive Committee on all aspects of computerized databases of chemical properties, including Division programmes which produce databases, needs for standardization for databases and chemical structure records, and policy on database dissemination.
- (ii) To advise Commissions on the design and implementation of databases and appropriate software and to encourage maximum compatibility of databases from different bodies within IUPAC.
- (iii) To promote, in collaboration with other ICSU bodies, a higher level of awareness of the application of computers in the management, dissemination, and use of chemical data.

COMMITTEE ON CHEMISTRY AND INDUSTRY (COCI)

Composition and Terms of Office

- (i) There shall be a standing Committee on Chemistry and Industry, composed of a Chairman, a Secretary, and a Member from each country or region having more than one Company Associate.
- (ii) The President in consultation with the Executive Committee shall appoint the Chairman, the Secretary and the Members. Candidates may be proposed by the Committee on Chemistry and Industry and by National Adhering Organizations having Company Associate programmes.
- (iii) The period of service shall be four years, renewable for a further term of four years.
- (iv) The Membership shall be reviewed every two years by the incoming President in consultation with the Executive Committee.
- (v) The sum of the years of service as a Member and as the Chairman or the Secretary shall not exceed ten years.

Terms of Reference

On behalf of the President and the Executive Committee:

- (i) to guide and inform Company Associates on IUPAC programmes and policies,
- (ii) to establish important areas of chemical science in IUPAC related to ongoing industrial needs.
- (iii) to put to industry enquiries on major chemical matters.

46 Standing Orders from Executive Committee

COMMITTEE ON PUBLICATIONS (PC)

Composition and Terms of Office

- (i) There shall be a standing Committee on Publications, composed of a Chairman, at least three and not more than six other Members, and the Scientific Editor of Pure and Applied Chemistry (PAC).
- (ii) The President in consultation with the Executive Committee shall appoint the Members. The Committee on Publications may propose names of persons suitably qualified for appointment.
- (iii) The period of service of the ordinary Members shall be four years, renewable for a further term of four years.
- (iv) The Membership shall be reviewed every two years by the incoming President in consultation with the Executive Committee.
- (v) The President in consultation with the Executive Committee shall appoint the Chairman. The Committee on Publications may propose candidates.
- (vi) The period of service of the Chairman shall not exceed eight years. The sum of the years of service as an ordinary Member and as the Chairman shall not exceed ten years.

Terms of Reference

- To advise the President and the Executive Committee on all matters of publications including policy.
- (ii) To make recommendations for decision by the President and/or the Executive Committee.

PURE AND APPLIED CHEMISTRY EDITORIAL ADVISORY BOARD (PAC-EAB)

C/ Sections

Composition and Terms of Office

- (i) There shall be an Editorial Advisory Board for the IUPAC journal Pure and Applied Chemistry (PAC), composed of a Chairman, a Secretary, the Chairman of the Committee on Publications, and one representative from each of the Divisions and from the Interdivisional Committee on Nomenclature and Symbols.
- (ii) The representatives shall be nominated by the President or the Chairman of the relevant IUPAC bodies, and be appointed by the President of the Union in consultation with the Executive Committee. Their period of service shall be four years, renewable for a further term of four years.
- (iii) The President in consultation with the Executive Committee shall appoint the Chairman and the Secretary. Their period of service shall be four years, renewable for a further term of four years.

Terms of Reference

On behalf of the Committee on Publications:

- (i) to review the editorial policy and contents of PAC at a General Assembly.
- (ii) to advise the Scientific Editor/Executive Editor, upon request, on material to appear in PAC,
- (iii) to discuss future contents and format.

CHEMISTRY INTERNATIONAL EDITORIAL ADVISORY BOARD (CI-EAB)

C/Sections

Composition and Terms of Office

- There shall be an Editorial Advisory Board for the IUPAC news magazine Chemistry International (CI), composed of the Secretary General (Chairman), the CI Editor (Secretary), the Chairman of the Committee on Publications, and one representative from each of the Divisions Land from the CHEMRAWN Committee, the Committee on Chemical Databases, the Committee on Chemistry and Industry, the Committee on Teaching of Chemistry, and the Interdivisional Committee on Nomenclature and Symbols.
- (ii) The representatives shall be nominated by the President or the Chairman of the relevant IUPAC bodies, and be appointed by the President of the Union in consultation with the Executive Committee. Their period of service shall be four years, renewable for a further term of four years.

Terms of Reference

On behalf of the Committee on Publications:

- (i) to review the editorial policy and contents of CI at a General Assembly,
- (ii) to advise the Editor, upon request, on articles to appear in CI,
- (iii) to discuss future contents and format.
- (iv) to ensure that IUPAC bodies provide the Editor, spontaneously or on request, with material on their work and future programmes.

Minute 6(V)/89, 112th Executive Committee COMMITTEE ON TEACHING OF CHEMISTRY (CTC) - Lisbon

and a Member from each of the Divisions! Sections.

Composition and Terms of Office

- (i) There shall be a standing Committee on Teaching of Chemistry, composed of a Chairman, a Secretary, who six other Members,
- The President in consultation with the Executive Committee shall appoint the Members. The Committee on Teaching of Chemistry may propose names of persons suitably qualified for appointment.

The period of service of the **Manage** Members shall be four years, renewable for a further term of four years.

The Membership shall be reviewed every two years by the incoming President in consultation with the Executive Committee.

The President in consultation with the Executive Committee shall appoint the Chairman and the Secretary. The Committee on Teaching of Chemistry may propose

The period of service of the Chairman and of the Secretary shall not exceed eight years. The sum of the years of service as a local Member and as the Chairman or the Secretary shall not exceed ten years.

Terms of Reference

- (i) To advise the President and the Executive Committee on educational matters.
- (ii) To coordinate the educational interests and activities of all IUPAC bodies.

(iii) The Divisional/Sectional Members shall be nominated by the relevant of the Union in Consultation with the Executive Committee.

48 Standing Orders from Executive Committee

(iii) To act as an informational and coordinating body for chemical education activities throughout the world and to establish a system of National Representatives as a channel of communication. To develop liaison with international organizations such as UNESCO and with national chemical societies or chemical education committees.

4.2.4/90, 114 th Executive Committee - Alkens

FINANCE COMMITTEE (FC)

and Executive Secretary (16 act as Secretary)

Composition and Terms of Office

Kree

- There shall be a standing Finance Committee, composed of fine Members and a Chairman. In addition, the Treasurer shall be ex officio Member, but without (i)
- The President in consultation with the Executive Committee shall appoint the Members. The Finance Committee may propose names of persons suitably qualified for appointment.
- (V) Mind The period of service of the ordinary Members shall be four years, renewable for a further term of four years.
- (Vi) Wwo The Membership shall be reviewed every two years by the incoming President in consultation with the Executive Committee.
 - (ii) The President in consultation with the Executive Committee shall appoint the Chairman. The Finance Committee may propose candidates.
- The period of service of the Chairman shall not exceed eight years. The sum of the years of service as an ordinary Member and as the Chairman shall not exceed ten years.

Terms of Reference

- (i) To advise the President and the Executive Committee on financial matters.
- (ii) To make recommendations for decision by the President and/or the Executive Committee.
- securities (iii) To review the IUPAC investment portfolio at least annually and to make such changes as appear appropriate.
- (iv) The Finance Committee shall not have executive functions except with respect to dealings in securities. The Finance Committee shall have executive authority with respect to selection, purchases, and sales of securities held by IUPAC, provided that the Treasurer band the IUPAG Banker concury with the decisions of the Finance Committee.

INTERDIVISIONAL COMMITTEE ON NOMENCLATURE AND SYMBOLS (IDCNS)

Composition and Terms of Office

- (i) There shall be a standing Interdivisional Committee on Nomenclature and Symbols, composed of a Chairman, a Secretary, the Scientific Editor of PAC, one Member and one Associate Member from each Division Jeww
- (ii) The President in consultation with the Executive Committee shall appoint the Members and the Associate Members of the Divisions. IDCNS and the Division / Section.

 Presidents may propose names of persons suitably qualified for appointment.

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SPONSORSHIPS OF SYMPOSIA BY IUPAC APPROVED BY CORRESPONDENCE

SINCE 114TH EXECUTIVE COMMITTEE MEETING

3rd International Symposium on Pharmaceutical and Biomedical Analysis Boston, USA: 28th April-1st May 1991

6th International Workshop on Vapor-Liquid Equilibrium in 1-Alkanol + n-Alkane Mixtures
Liblice, Czechoslovakia: 13th-17th May 1991

8th Bratislava International Conference on Solution Properties of Modified Polymers Tatranská Lomnica/High Tatras, Czechoslovakia: 10th-14th June 1991

International Symposium on Calorimetry and Chemical Thermodynamics Moscow, USSR: 24th-28th June 1991

10th International Conference on Computers in Chemical Research and Education Jerusalem, Israel: 14th-19th July 1991

22nd International Conference on Solution Chemistry Linz, Austria: 14th-19th July 1991

11th International Conference on Chemical Education York, UK: 25th-30th August 1991

10th International Symposium on Cationic Polymerization and Related Ionic Processes Balatonfüred, Hungary: 26th-29th August 1991

1st International Symposium on Self-Propagating High-Temperature Synthesis Alma-Ata, USSR: September 1991

16th International Symposium on Macrocyclic Chemistry Sheffield, UK: 1st-6th September 1991

4th European Conference on Spectroscopy of Biological Molecules York, UK: 1st-6th September 1991

International Conference on Applications of Mössbauer Effect Nanjing, China: 16th-20th September 1991

International Workshop on Electron Spin Echo Spectroscopy Novosibirsk, USSR: 25th-28th September 1991

International Symposium on Olefin and Vinyl Polymerization and Functionalization - Reaction, Mechanism and Industrial Application Hangzhou, China: 14th-18th October 1991

International Symposium on Enzymes in Organic Synthesis New Delhi, India: 6th-9th January 1992

9th International Conference on Organic Synthesis Montreal, Canada: 5th-9th July 1992

29th International Conference on Coordination Chemistry Lausanne, Switzerland: 19th-24th July 1992

3rd International Symposium on Analytical Chemistry in Exploration, Mining and Processing of Materials

Randburg, Transvaal/Republic of South Africa: 3rd-7th August 1992

2nd International Symposium on Bioorganic Chemistry Fukuoaka, Japan: 7th-10th June 1993