

INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY

MINUTES OF 123rd EXECUTIVE COMMITTEE MEETING

Hawkwell House Hotel, Oxford, UK: 20th-21st April 1996

Present: Prof. A. E. Fischli (Chairman), Dr. E. D. Becker, Prof. R. D. Brown, Dr. D. F. Eaton, Prof. J. Jortner, Prof. P. S. Steyn, Prof. J. M. Ward

Absent: Prof. K. I. Zamaraev

In Attendance: Dr. M. Williams (Executive Secretary), Dr. J. H. Williams (Deputy Executive Secretary)

1/96 INTRODUCTORY REMARKS AND FINALIZATION OF AGENDA

The President welcomed the participants to a specially important meeting for the future of the Union, and he regretted the absence of Prof. Zamaraev due to sudden illness. The Secretary General agreed to send him the best wishes of the Committee for an early recovery to full health.

The agenda circulated by the Executive Secretary (96.04.04) was approved.

2/96 MINUTES OF 121st AND 122nd MEETINGS OF EXECUTIVE COMMITTEE

2.1/96 Amendments and Approval of Minutes

The minutes of the meetings at Reading (circulated by the Executive Secretary 95.06.28) and at Guildford (circulated by the Executive Secretary 96.04.04) were approved, subject to correcting the term of service for Dr. M. D. Booth to 1996-1999 in Minute 6.7(ii)/95.

2.2/96 Matters Arising

2.2.1/96 Nominations for Award of International Prizes (Minute 6.5/95)

Consideration of future nominations by IUPAC for various international awards had been deferred, pending elaboration of an appropriate procedure for handling such nominations within the Union. Rather than involve the International Chemistry Council (Minute 3.2/96), Prof. Fischli suggested that the Past-President might become responsible for such nominations, in conjunction with a few colleagues from the Executive Committee as necessary, with the President of the Union to present any eventual nominations on the advice of the Past-President. Prof. Fischli agreed to discuss his suggestion with Prof. Zamaraev.

2.2.2/96 Observer Country Status of Uzbekistan (Minute 7.3.2/95)

The Executive Secretary reported that there had been no response from the Uzbek Chemical Society to the acceptance of its application for Observer Country status and the annual service charge for 1995 remained unpaid. Unless Prof. Zamaraev was able to resolve this impasse, the Executive Committee recommended that the OC status should be withdrawn.

3/96 MINUTES OF 66th AND 67th MEETINGS OF BUREAU AND MATTERS ARISING

The minutes of the meetings at Guildford (circulated by the Executive Secretary 96.02.09 and 96.04.04, respectively) were recorded as having been received officially by the Executive Committee.

3.1/96 IUPAC Recommendations on Names and Symbols of Transfermium Elements (Minute 3.1/95)

The recommendations, reclassified as provisional, had duly been circulated (95.10.06) to national/regional nomenclature centres in the normal way, with notices to be published in national/regional chemistry journals and magazines, including an official announcement in the January 1996 issue of CI (pages 33-34). Submission of comments to the Commission on Nomenclature of Inorganic Chemistry (CNIC) was requested by 96.05.31. The NAOs had been invited specifically by Prof. Zamaraev (95.12.13) to comment on the issues.

The Executive Secretary was asked by the President to ascertain the dates for the 1996 meeting of CNIC and, if necessary, to insist that CNIC should meet before the Bureau, so that its report could be available to the Bureau.

3.2/96 Collaboration with UNESCO (Minute 3.2/95)

The President presented an update on the composition of the International Chemistry Council (ICC: Appendix A), which was intended to provide intellectual leadership in assessing priorities for advance in chemistry worldwide, and to furnish advice primarily by correspondence. Also, the ICC might advise on future scientific policy of the Union, and possibly comment on any alternatives arising from discussions at the present meeting (Minute 3.3/96). At a meeting of the UNESCO-IUPAC Coordinating (Executive) Committee for Chemistry (Paris, 95.12.12), financial allocations for 1996-7 were announced, including provisions for the CHEMRAWN IX Conference (Seoul, 96.09.01-06), for collaboration with COCI [IUPAC-UNESCO-UNIDO Training Programmes, 3rd IUPAC Workshop on Safety in Chemical Production (San Francisco, 97.04.13-17)], for collaboration with IOCD-IUPAC (workshop in Ecuador on training of chemists for environmental control), and for assistance to least developed countries.

Dr. J. H. Williams reported on his meeting with Dr. Becker and Prof. V. Zharov (Paris, 96.02.19), when it was made clear that UNESCO had cash-flow problems for projects, and it was revising the biennial budget. Some money was still outstanding for the IUPAC training programmes in 1995 on monitoring of ciguatera and ochratoxins. A draft charter was to be provided for ICC, based on that for the Physics Action Council. Prof. Zharov had suggested that IUPAC should seek from within the Union suggestions of topics for possible future collaboration. The resulting list should be examined within IUPAC, possibly using ICC to assign priorities, and submitted to UNESCO. Dr. Becker also mentioned the possibility of collaboration through the Regional Offices of UNESCO, and even of submissions through UNESCO National Committees into the biennial UNESCO Conference.

3.3/96 Future Scientific Policy of the Union (Minute 3.3/95)

The Secretary General drew attention to the circular request from Prof. G. den Boef after Guildford (95.10.05) for submission of strategic plans by Commissions as part of the need to develop policies to revitalize the activities of the Union and to modify organizational structures in readiness for IUPAC to meet its responsibilities in the 21st century. On further consideration by the outgoing and incoming IUPAC Officers (Paris, 95.12.11), doubt was expressed whether, without very clear guidance, such plans might actually be of much value, and even lock the Union into its present structure. Regarding the question of a possible new mission statement for the Union, the approach proposed by Prof. Steyn in his position paper on *Strategy for IUPAC* (95.08.07) had found favour, and it might be worked up to provide a framework for informal discussions by scientific leaders, both inside and outside IUPAC. Dr. Becker mentioned that IUBS was undergoing a similar review of its structure and function (*Biology International*, January 1996), with a view to proposing measures which could better help to meet

emerging needs, new demands, and challenges.

Dr. Becker elaborated on the use of Prof. Steyn's position paper for consideration at some "brainstorming" sessions in USA and elsewhere, in an attempt to develop suitable long-range plans. In particular, he outlined his idea for a session at the American Chemical Society's Belmont Conference Center, near the Baltimore-Washington international airport, on 96.06.11-12. The focus for the participants might be to address the question: "If you had to invent an international organization to help further the development of chemistry and the chemical industry, what would it do?" Use of the Center, meals, and lodging would be covered by ACS, and Dr. Becker sought travel support from IUPAC of about USD 6 000 for some twelve academic and industrial chemistry leaders in North America.

Prof. Steyn recommended that some young upcoming chemical "stars" from the Washington area should be included amongst the participants, and he reemphasized his personal conviction of the need for a clear statement on the future strategy of the Union. Prof. Jortner suggested that one or two "practising" chemists might also be invited. Prof. Brown suggested that an "IUPAC Future Activity" item might be featured at appropriate national meetings, such as those of heads of chemistry at universities, to provide feedback on various alternatives for the Union. Dr. Becker said that the outcome of the Belmont and similar workshops might be presented for discussion at such national meetings.

The Executive Committee approved the provision from reserves of USD 6 000 ( $\pm$  1 000) as travel support for the Belmont workshop, with the expenditure to be itemized separately in the IUPAC accounts, because there was no budgetary provision for this activity. The President asked Dr. Becker to provide Prof. Jortner and himself urgently with a report on the deliberations at Belmont, so that they could organize at least one similar workshop in Europe.

The President drew attention to consideration by the Officers (Paris, 95.12.11) of suggestions from Prof. Jortner to combine the Physical Chemistry and Analytical Chemistry Divisions (I and V), to combine the Inorganic Chemistry and Organic Chemistry Divisions (II and III - including also the Nomenclature Commission from Division IV), and to create a Division of Chemistry and Materials from the bulk of the Macromolecular Division (IV - plus some other Commissions, such as II.3). Personally, he favoured the inclusion of Biological Chemistry in any merged Divisions II and III. Prof. Fischli had subsequently outlined the suggestions in telephone conversations with the relevant Divisions Presidents, encouraging them to consider the implications and let him have their views, prior to actual meetings for further discussion in advance of the 1996 Bureau. The views of Prof. G. J. Leigh (II: 96.04.18) were available as a late paper, and Prof. Fischli indicated that there had been written exchanges by himself with Prof. G. Somsen (I) and Prof. G. Scorrano (III).

The Treasurer felt that the most important point to get across to the Divisions was the need to concentrate much more on fewer projects than at present, bearing in mind the Union's relative lack of money and the voluntary nature of IUPAC work. Dr. Becker was anxious to discontinue the present practice for all projects to be undertaken in established Commissions: money should be available for projects in accordance with the present "Pool" concept (*IUPAC Handbook 1994-1995*, page 45), but not restricted by the need to appoint "Pool Titular Members".

Prof. Jortner outlined his view of the future priorities of the Union, which would form Part I of his forthcoming Vice-Presidential critical assessment of programmes and projects (Minute 6.4/96). Although he had already suggested some significant changes to the Divisional structure of IUPAC, he cautioned not to change the structure too quickly, but to do so only in a well-defined

manner. Prof. Brown favoured moving away from the present system of "Standing Commissions" towards an "ad hoc" structure, and he proposed that this should be considered by Prof. Fischli in his meetings with Division Presidents.

3.4/96      Progress on Pool Projects 1996-7 and Project Submissions for 1998-9 (Minute 3.4/95)

The Executive Secretary had precirculated an updated status report (as at 96.04.01) on the pool projects for 1996-7. A report was outstanding from the meeting at Guildford on *Oil Spill Clean-up and Remediation*. The prospective coordinator for *Remediation of Heavy Element Contaminated Sites* was eventually unable to participate, and there was no suggestion yet as to an alternative person to approach. That subject was also under investigation for a possible future CHEMRAWN Conference on Remediation of Polluted and Contaminated Soils. Only one Pool TM, out of the three allocated, had been appointed for Analytical and Physical Chemistry of Soils. The project on *Environmental Safety Assessment of Agrochemicals* was now problematic in scope, and an alternative approach to an *International Harmonization of Environmental Assessment of Pesticides for Registration Purposes* was under consideration. A replacement Pool TM might be proposed.

Dr. M. Williams said that the Pool projects were causing him much unnecessary work, often without any positive outcome. The Executive Committee:

- (i) agreed that the Secretary General should critically evaluate the status of the 1996-7 Pool projects with the Executive Secretary and, where necessary, recommend withdrawal of monies already allocated, with a view to their use for other purposes;
- (ii) confirmed the earlier intention not to include Pool projects in the current programmes database established at the Secretariat (paper on Pool project procedures for 1998-9 tabled by Prof. den Boef and Dr. M. Williams at Guildford);
- (iii) agreed that, where a Pool project was joint between two IUPAC bodies, a lead body should be identified.

Prof. Brown mentioned the difficulty of completing Pool projects within two years, drawing attention to the granting for good reasons of some extensions for projects in 1994-5 to 1996-7. Prof. Jortner concluded that the Pool projects mechanism had failed to come up to expectations, and it needed to be reconsidered: existing Commissions were using it to carry out work, which could be tackled in the normal manner. He supported the view of Dr. Becker (Minute 3.3/96), that Pool projects should not be restricted by the need to appoint Pool TMs.

Prof. den Boef had invited (95.12.07) NAOs and IUPAC bodies to submit detailed proposals for pool projects in 1998-9 preferably by 96.04.01, but not later than 96.08.01. The Executive Committee agreed that there should be stricter adherence for 1998-9 to the general principles already approved for Pool projects, and that the President should discuss with:

- (i) Prof. Somsen the progress achieved so far in the *Scanning Calorimetry and Redox Potentials of Proteins* projects, for which extensions had been requested for 1998-9;
- (ii) Profs. Leigh and Scorrano what were the implications for Commission III.1 and organic nomenclature considerations in respect of the proposed project on *Computer-aided Nomenclature*, originating from Commission II.2;

- (iii) Prof. Leigh whether the proposed project on *IUPAC Elemental Textbooks* should be financed from allocated Division II biennial funds;
- (iv) Profs. Leigh and J. Economy the progress achieved so far in the *Sol-Gel Terminology* project, for which extensions had been requested for 1998-9;
- (v) Prof. J. D. Bradley whether seed money for two years should be provided for the proposed CTC project on *Education in Chemistry and Human Health*.

Dr. Eaton regretted that, so far, there had been no Pool project proposals received from NAOs for 1998-9. Nevertheless, the Executive Committee decided not to circulate a reminder about submission of proposals.

3.5/96      IUBMB-IUPAC Joint Commission on Biochemical Nomenclature  
(Minute 3.8/95)

The Executive Committee noted that IUBMB's concern about how to finance the secretarial work of JCBN would be reviewed in July 1996. Its Executive Committee had so far only guaranteed such support for 1996.

3.6/96      Affiliate Membership Programme (Minutes 4.5 and 13.2/95)

The Deputy Executive Secretary referred to his precirculated documentation (a new leaflet for AMP, printed in Canada through Prof. J. W. Lorimer, which was now being distributed to IUPAC-sponsored symposia and for other miscellaneous purposes; his own thoughts on the status of AMP (as at 95.10.09) and on the sponsored Affiliate programme (96.03.11)), and he tabled an interim report from Prof. Lorimer (96.04.17, which had subsequently been extended). Prof. Lorimer invited comments from the Executive Committee, for consideration by the Committee on Affiliate Membership (CAM) prior to its report to the Bureau later in the year. Dr. Eaton pointed out that the interim report represented essentially the ideas of Prof. Lorimer, rather than a consensus view of CAM: personally, he supported discontinuation of the sponsorship part of AMP.

The President reminded the meeting that the task of the reconstituted CAM [Minute 13.2(i)/95, 67th Bureau - Guildford] was "to reconsider the possible replacement of AMP as such with elements of priority as identified by the Bureau and Council at Guildford, including a critical evaluation of the overheads and Secretariat staff costs". CAM was expected to propose ways to retain aspects of AMP that were good, while recommending taking away what was seen to be a drain on resources: the programme as it now existed must be transformed.

The Treasurer said the interim report only reconfirmed his previous opinion that the support for AMP shown at the Guildford Assembly by NAOs was more apparent than real, and that in the long run AMP would need to break even financially: there had been only a 38% response to the questionnaire to NAOs (November 1995), which had failed to include a question on how NAOs intended to recruit more Affiliates.

The Secretary General was not so worried about the relatively small deficit in operating AMP (even some USD 25 000), provided that the Union was gaining advantage from a public relations point of view, which was not clear. Could publicity for AMP be improved by use of the new IUPAC home page on the world wide web? Dr. J. H. Williams said that information about AMP was already included in the IUPAC home page, but there had been no obvious response.

Prof. Steyn pointed out that, so far, the interim report did not include the requested critical evaluation of the AMP overheads and Secretariat staff costs. Prof. Brown had always been pessimistic at the potential success of

AMP. A benefit which needed greater emphasis, by mentioning in the symposia brochures, was the reduction in registration fee for Affiliates. A massive advertising campaign was needed to increase the numbers of Affiliates, independently of the NAOs, perhaps at sponsored symposia. Dr. M. Williams mentioned that some symposia organizers had complained that their budgets had not foreseen the need to provide for reduced registration fees for Affiliates.

The Executive Committee was unanimously against Prof. Lorimer's suggestion of a mandatory requirement for all voting members of IUPAC bodies to become Affiliates. It noted that there had been no opposition to the postal recommendation from Dr. Becker (95.12.14) for discontinuation of the Affiliate membership database at the Secretariat, and the part-time secretarial assistant responsible for the database had subsequently left the Secretariat staff.

Prof. Jortner was in favour of termination of AMP as such. The ideology of any future new programme should be based on addressing the problems of general international communication, visibility of the Union and participation of young people, involvement of developing countries, retaining the interest of the "old guard", and service to the community. Unless the Union came to a credible alternative, it might be difficult to terminate the programme. He supported the introduction of an IUPAC Fellowship scheme and the retention of "Affiliates". Conditions must be devised to attract these categories of adherent (such as cheap journal subscriptions and a large reduction in registration fees for IUPAC-sponsored symposia).

Prof. Fischli concluded that Prof. Lorimer should be requested to deliver a report to the Bureau for a streamlined AMP, eventually more attractive by adding alternatives for young and older chemists. For instance, why not offer an IUPAC scholarship programme, for any Affiliate wishing to change direction from a career in chemistry to one in science writing, business administration, or patent law. Such a programme might cost the Union perhaps USD 30 000 per annum, possibly with some financial help from UNESCO. Prof. Jortner supported these ideas, but he emphasized that the main priority must still be to encourage young chemists to continue in that science.

3.7/96 Manila Declaration and Melaka Accord (Minute 4.8/95)

The President referred to the precirculated IUPAC statement, drafted by the Medicinal Chemistry Section. He was looking forward to its approval by the Bureau in September 1996 and rapid publication by the Union, in order to ensure concurrence with activities launched by IOCD in similar fields. In his opinion the draft was a shortened, but improved version of the Declaration and Accord: company lawyers were happy with the actual Declaration, but not with the Accord. It was now important for COCI to respond positively or not to the draft.

The Executive Committee agreed that, if COCI and the Australian NAO supported the draft, then the Bureau should be recommended to approve publication expeditiously in PAC. Prof. Steyn suggested that a press conference might be held to increase visibility of the Union, but Prof. Jortner cautioned that such a conference must be well prepared and managed.

3.8/96 Division Budget Allocation per Titular Member (Minute 5.1/95)

The Treasurer drew attention to his precirculated paper (96.03.14), and the tabulated 1996-7 allocations per zero-sum TM for each Division. The disparity between the allocations was now worse than when he had reported previously to the Executive Committee [Minute 4.6.4(ii)/93, 118th Meeting - Newark]. Prof. Steyn felt that the difference in allocations for the various Divisions should not be greater than 10%. However, bearing in mind the

Officers' preference not to act until further major changes envisaged in divisional restructuring had been accomplished (Paris, 95.12.11) and Dr. Becker's ideas for future project financing within the Union (Minute 3.3/96), the Executive Committee decided to postpone any action to decrease the present disparity.

3.9/96      IUPAC Home Page on Internet and Other Publicity about the Union  
[Minutes 5.3(ii) and 3.3/95]

- (i)      The President congratulated the Secretariat, particularly the Deputy Executive Secretary (DES), in launching at the beginning of February 1996 an IUPAC home page on the Internet (World Wide Web) as a subagent of the UK Royal Society of Chemistry's home page. The IUPAC Officers had approved (Paris, 95.12.11) a recommendation to accept the offer from RSC, which was providing the necessary computer skills for mounting text on the Internet, and paying a subscription to PIPEX as the Internet provider for its home page.

The DES elaborated briefly on evolution of the IUPAC home page, which provided comprehensive information on the work of the Union, including directories of IUPAC bodies, NAOs, OCs, and AOs at <http://chemistry.rsc.org/rsc/iupac.htm>. Chemists would be kept up to date with the Union's meetings and training for safety and environmental protection. Also, they would be able to visit chemical industry WWW sites via hypertext links to CAs, publications via Blackwell Science, and some nomenclature recommendations via Dr. G. P. Moss. As the contents of the home page were expanded, Dr. J. H. Williams anticipated that RSC would eventually become unwilling to "mark up" the increasingly large quantities of material provided by IUPAC. Statistics from RSC for weekly consultation (100-200 "hits") of the IUPAC home page were judged to be a reasonable response. The DES had investigated six WWW "search engines", of which three provided direct location of the IUPAC home page.

The fourth draft guidelines of the Working Party of the Committee on Printed and Electronic Publications (96.03.26), on *Use of the World Wide Web for Access to IUPAC Material*, had been precirculated. Dr. Becker said that there was some concern about provisional recommendations being cited rather than for comment only. Also, he recommended deletion of the third sentence in section 5.0 of the guidelines - "However, IUPAC will not give financial or other support to such external sites." - because the Union might wish occasionally to finance such action. Subject to this amendment, the guidelines were approved by the Executive Committee for inclusion on the home page, publication in CI, and communication by e-mail to Officers of all IUPAC bodies.

Dr. Becker suggested that each time the home page was updated in some way at RSC, the date should be inserted. In addition, Dr. Eaton suggested that the home page reference should be included on the next revised printing of the Secretariat and other letterheads.

- (ii)      The Treasurer spoke to his precirculated paper (96.03.13), *A Reply to the Critics and Doubters*. He felt that, despite the launching of the IUPAC home page on the Internet as the main new publicity channel for the Union, an article was still needed that answered the hearsay criticism, which IUPAC was receiving from some parts of the chemical and allied industries, and which was being taken up and repeated by those who were antipathetic to the Union. To be really effective, such an article required a few quantitative examples of how the Union's work had saved, or could potentially save, money for the chemical industry.

Prof. Brown strongly supported the ideas of Prof. Ward, referring to the phase diagram for the separation of organic oxygenates and hydrocarbons (e.g., petrol) into two phases, the equation of state for methane which was of vital use in the way liquid methane was purchased and sold in bulk quantities, and the transport properties of R134a (a new refrigerant less harmful to the ozone layer: March 1996 issue of CI, pages 44-47). Dr. Becker expressed interest in receiving more details for use at the forthcoming Belmont workshop (Minute 3.3/96), and also to circulate to Division Presidents in order to identify other similar projects. Dr. Eaton was ready to prepare with Dr. J. H. Williams for the home page the three examples already identified. The President said that COCI might eventually take over this aspect of publicity for the work of the Union.

3.10/96      Standing Orders for Monographs on Chemistry for the 21st Century  
              - Editorial Advisory Board [Minute 5.3(vii)/95]

- (i)      The rewording of item (ii) of Composition and Terms of Office in the Standing Orders for the EAB to

"The series shall be completed by 1999, with all monographs to be commissioned by the end of 1997, when the Monographs-EAB shall be discontinued."

which had been approved through correspondence by the President, was ratified by the Executive Committee.

- (ii)      The Executive Committee ratified the action of the Executive Secretary in extending to all Standing Orders of the Executive Committee for Standing Committees in *IUPAC Handbook 1996-1997*, the preference of Council at Guildford (agenda item 13, 38th Meeting) to use "Titular Member" instead of "Member" in the Statutes and Bylaws.

3.11/96      Future Structure and Location of IUPAC Secretariat  
              (Minute 7/95)

The President introduced the matter by referring to the scheduled retirement of Dr. M. Williams as Executive Secretary (97.04.30) and Mr. P. D. Gujral as Scientific Publications Secretary (98.02.28), with Miss Ann Troughton having recently retired as Deputy Executive Secretary (95.03.31). This provided a unique opportunity, if advantageous, to move the Secretariat elsewhere, and to revitalize its operation with perhaps a changed delegation of responsibilities for the various staff, thereby providing a different "culture". A significant financial investment in future information technology equipment and other facilities would be needed, whether the Secretariat remained in Oxford or was moved elsewhere (Gesellschaft Deutscher Chemiker/Frankfurt, Research Triangle Park/North Carolina, Maison de la Chimie/Paris). Prof. Fischli emphasized that, as a globally active, international organization, IUPAC had a tradition of moving its Secretariat: the Secretary General's office was located in Paris during 1920-1955 and in Basle during 1956-1968, and since mid-1968 the Executive Secretary's office had been in Oxford.

The Secretary General had contacted the authorities at Frankfurt, North Carolina, and Paris, in order to obtain further particulars, so that a meaningful comparison of these possible locations could be made with Oxford (IUPAC Officers, Paris: 95.12.11). His evaluation of the resulting data (covering space and locale, personnel and other costs, factors involved in a possible move, and one-time costs of a move) had been precirculated, together with an appendix of all relevant submissions.

The Treasurer drew attention to his late paper, comparing staff costs in FRG,



France, UK, and USA [based on *World Competitive Report 1995*, produced jointly by the Institute for Management and Development (Lausanne) and the World Economic Forum (Geneva)], which contradicted some of the data reported by Dr. Becker. However, his main concern was the loss of continuity and disruption in a move from Oxford, but he indicated that the financial reserves of the Union were more than sufficient to cover termination costs of existing staff, transportation of archives and other documentation elsewhere, purchase of new electronics, other equipment and furniture, and possible higher operating costs.

In addition to consideration of costs factors for the future Secretariat, Prof. Jortner stressed the need to avoid any criticism of dominance of a member country in IUPAC affairs, to ensure vital stability in the Secretariat activity for the Union (bearing in mind the relatively quick turnover of its Officers), and to avoid isolation of the Secretariat intellectually and regarding accessibility.

The views of Dr. Eaton and of Profs. Brown and Steyn were noted, especially the importance of appointing an appropriate successor to Dr. M. Williams as Executive Secretary.

In summarizing the discussions, the President pointed out that, apart from Prof. Ward, there was a consensus in favour of moving the Secretariat during 1997 to North Carolina for at least the next ten years, and then to review the location every ten years. This would confirm IUPAC as a globally active, international organization. Prof. Fischli would convey the outcome of the discussions to the authorities in Frankfurt, North Carolina, and Paris.

Dr. Becker had already arranged to advise the existing staff on 96.04.22 about the future location of the Secretariat. He would present the rationale for the move to North Carolina, and stress the intention to make generous redundancy payments to encourage staff to stay as long as possible, in order to complete projects - especially preparations for and operation of the 1997 General Assembly at Geneva - and to effect an orderly transition to the new location. In mid-May he proposed to hold detailed discussions with the individual staff.

3.12/96      Clarifications, Corrections and Amendments re Appointments of New Members to Division/Section Committees and Commissions  
(Minute 11/95)

- (i) Corrections and amendments (as at 96.04.01) to the information, supplied at Guildford re appointment of new Members to Division/Section Committees and Commissions, were noted by the Executive Committee. A listing of multiple IUPAC commitments (as at 96.04.03) indicated that there was only one transgression of the policy for persons to limit themselves to three commitments (Statute 4.2): the present four commitments for Prof. De Bièvre would reduce to three at the end of 1996.
- (ii) The Executive Committee confirmed that Commission IV.3 must continue in the official records of the Union during 1996-1997 under the title "Commission on Functional Polymers", and simply list Prof. Ann-Christine Albertsson and Prof. S. Huang as Titular Members (1994-1997). If the Macromolecular Division wished to discontinue the Commission under that title, it should submit a written request to the Executive Committee (Bureau), recommending that Council do so at Geneva and say why. If a new Commission on Polymers and the Environment (in effect replacing the present IV.3) was to be created, terms of reference should be proposed, and an indication given of the required Officers/Titular and Associate Members (drawn from the zero-sum of the Macromolecular Division). Justification would also be

needed why this Commission should not be located in the new Division of Chemistry and the Environment.

A recommendation to appoint Prof. Albertsson as Chairman of Commission IV.3 (1996-1997) was approved (Bylaw 4.303).

- (iii) The President reported that he had written twice, but so far without any response, to Dr. J. L. Fox (Chairman of Commission VI.2 during 1991-1995), to obtain his firm commitment to the success of Biotechnology in IUPAC and for a clear assurance that he would have sufficient time available for its effective future management. Prof. Fischli agreed to send a third letter by registered post, setting 15th May 1996 as a deadline for a written response, failing which Dr. Fox would be discounted from further action to be taken by the Union in Biotechnology.

The Titular Membership, proposed at Guildford by the Commission on Biotechnology for 1996 onwards, had not been approved by the Bureau, and the Commission was now effectively in a state of suspension. It could not meet under the IUPAC flag in 1996, and no financial support could be provided by IUPAC for such a meeting.

#### 4/96 MINUTES OF MEETINGS OF STANDING COMMITTEES

Minutes were recorded as having been received officially by the Executive Committee from meetings of the Committee on Chemical Databases (Guildford, 95.08.05-07 and London, 95.12.03), Committee on Teaching of Chemistry (Guildford, 95.08.05-06), Environmental Chemistry Matters (Guildford, 95.08.05), Division/Section Presidents (Guildford, 95.08.06), CHEMRAWN Committee (Guildford, 95.08.07-08), Committee on Chemistry and Industry (Guildford, 95.08.07), Interdivisional Committee on Nomenclature and Symbols (Guildford, 95.08.08-09), Committee on Affiliate Membership (Guildford, 95.08.08), and Finance Committee (Zürich, 96.02.19). No minutes had yet been drafted by the Scientific Publications Secretary for the meeting of the Committee on Publications (Guildford, 95.08.04-06). The Secretary General had read the various minutes, and he had no matters to raise other than those already listed in the agenda.

#### 4.1/96 Matter Arising from Meeting on Environmental Chemistry Matters

##### 4.1.1/96 Coordination of Environmental Activities within IUPAC (Minutes 4 and 5.8/95, 66th Bureau)

The Executive Secretary doubted whether an annual meeting of interested bodies, under the chairmanship of the President of the Division of Chemistry and the Environment, would constitute an effective coordination mechanism for environmental activities throughout the Union. The Executive Committee decided to await the outcome of the coordination meeting scheduled for 96.09.06 at Oxford. Meanwhile, Dr. M. Williams would send Dr. J. Miyamoto and Prof. Fischli a printout from the updated current programmes database (Minute 6.4/96) of all projects with the designation "E" (Environmental).

#### 4.2/96 Matters Arising from Committee on Chemistry and Industry

##### 4.2.1/96 Special Issue of PAC on "Chlorine Question" (Minute 5.5/95, 66th Bureau)

The President reported on progress towards publication of the special issue of PAC: contributions had been invited from fifteen specialists and research/development managers. Publication was tentatively scheduled for August 1996, and there were plans to make bulk copies available for purchase by chemical

industry. Financial support was being provided by the European Chemical Industry Council, and possibly by the Japanese and USA Chemical Manufacturers Associations. There was also available the surplus money from the 1st IUPAC Workshop on Safety in Chemical Production (Basle, 1990). A press conference might be arranged at Brussels to launch the issue officially, at which it was important for IUPAC to feature as the main instigator of the project.

#### 4.2.2/96 Proposed Interdivisional Project on More Efficient Use of Water

A paper from COCI was considered, suggesting an interdivisional IUPAC project on more efficient use of water for both developed and developing countries throughout the world. Water and its derived aspects, such as availability, distribution, purification, reuse, and its role in bioprocesses, were of decisive importance in the struggle for man's future survival. Such a project should result in well balanced proposals (as a book outside PAC?) to be put to governments and the UN organization. The Executive Committee approved the initiation of this project by COCI, in conjunction with the Commission on Soil and Water Chemistry and with possible involvement of the Commission on Photochemistry.

#### 4.3/96 Matter Arising from Interdivisional Committee on Nomenclature and Symbols

##### 4.3.1/96 Fullerene Nomenclature and Terminology (Minute 3.2/95, 121st Executive Committee)

The Executive Secretary indicated that an agreed document had been delayed due to the late response of the American Chemical Society's Chemical Abstracts Service, but it should be available for consideration when the Commission on Nomenclature of Organic Chemistry met at Prague in August 1996. It would be published as an interim report, but not as approved recommendations: no further review by IDCNS was required.

#### 4.4/96 Matters Arising from Finance Committee

##### 4.4.1/96 Statement of Accounts for 1995 [Minute 4.1(i)/96]

- (i) The Statement of Accounts (as at 96.03.08) and the Treasurer's assessment (96.02.23 - to be published in the July issue of CI) had been precirculated. The surplus was a substantial one - USD 113 344. Added to the 1994 surplus of USD 148 718, this gave a biennial surplus for 1994-5 of USD 262 062, a further confirmation that IUPAC's finances were now well under control. However, Prof. Ward stressed that one should not conclude the Union would continue to make substantial surpluses, and that it could rely on their potential to increase the expenditure to any marked extent. ~~If necessary, the Building Fund could be used to help finance the Secretariat move from Oxford to North Carolina (Minute 3.11/96).~~ The Executive Committee agreed that the audited accounts for 1995 should be presented to Council at Geneva.
- (ii) The Treasurer referred to the deficit incurred by the UK Royal Society of Chemistry from its organizational involvement in the 1995 IUPAC General Assembly at Guildford, and to the Society's invitation to the Union to meet part of it. The Executive Committee was sympathetic, but pointed out that it was not unusual for the host society to incur a deficit: the President said that the Swiss organizers expected to have to make a substantial contribution towards the arrangements for the 1997 Assembly at Geneva. With some regret, it was decided not to establish a precedent by contributing towards the cost of the Guildford Assembly.

4.4.2/96 Relocation of Official Headquarters of IUPAC  
(Minute 4.4/96)

The Executive Secretary reported that a new order had been issued by Finanzdirektion des Kantons Zürich (96.03.29). It confirmed the tax exempt status of the Union, with the Treasurer's office - official headquarters of IUPAC (Statute 4.3) - now located at the premises of Neutra Treuhand AG in Zürich.

4.4.3/96 Sinking Fund (Minute 6.3/96)

The Treasurer drew attention to his biennial report to the Council at Guildford, in which he had suggested that, provided the present financial position was maintained, it should be possible to establish a Sinking Fund, separate from the main reserves, into which about USD 50 000 might be placed each year. This would enable the General Assembly to be held from time to time also in the Southern Hemisphere. The Finance Committee had, therefore, agreed to establish a Sinking Fund of USD 50 000, and this action was endorsed by the Executive Committee.

4.4.4/96 Budgets for 1996 and 1997 (Minute 7/96)

The budgets approved by the Council at Guildford (95.08.11) had been precirculated. The Treasurer pointed out that, if the President's wish to adhere to a balanced budget for the 1996-7 biennium was to be respected, it was essential to retain the budget provision of USD 500 000 for the Geneva Assembly (Minute 5.1.1/96).

4.4.5/96 Committee Membership (Minute 8/96)

The Executive Committee noted that Prof. Ward would adhere to his original intention at Guildford only to serve two more years as Treasurer of the Union (1996-7). However, if so desired, he was willing to remain a Member of the Finance Committee, and even as its Chairman. In accordance with traditional practice, the vacancy for the office of Treasurer would be announced to the NAOs at the end of 1996.

5/96 FUTURE GENERAL ASSEMBLIES AND CONGRESSES

5.1/96 39th General Assembly (Geneva, 1997)

5.1.1/96 Status Report

The Treasurer referred to his precirculated estimates for the travel and subsistence costs (96.02.23) and to the appointment of a professional agency (AKM) by the Swiss organizers. The agency would, in effect, derive its fee at the expense of a reduced IUPAC per diem. Prof. Ward reminded the Committee that the maximum per diem for any location in 1996 was USD 125 (CHF 154 as at 96.04.19), which was significantly less than the present offer from AKM (CHF 150-170 for single rooms/breakfast in three star hotels). If the IUPAC total budget of USD 500 000 was to be retained, no significant increase in travel costs was possible. About 100 persons could be accommodated in cheaper campus-style rooms (CHF 50 per day), but a reduced per diem would need to be applied, if there was to be any financial saving to the Union. Dr. J. H. Williams had advised AKM and the Swiss organizers (96.03.26), that a per diem of USD 186, based on AKM's offered accommodation rate, was unacceptable to IUPAC, since it would result in the Union's budget being exceeded by about USD 150 000.

The President insisted that the Union must adhere to its budget provision of USD 500 000 for the Assembly. He agreed that a per diem of USD 125 was the

maximum for IUPAC, and that a flat rate per diem should not be applied irrespective of the accommodation used by different participants. Prof. Fischli would make it clear to the organizers, that AKM's fee must be met from sources other than through the reduced room rates which it levied.

At the suggestion of the Secretary General, the Executive Committee agreed that the cheaper campus-style accommodation should be allocated by AKM on a "first-come, first served" basis. Once the per diem rates had been fixed with AKM as now decided by the Executive Committee, Prof. Ward asked the Deputy Executive Secretary to prepare detailed travel estimates, so that claim forms could be issued by IUPAC within the total budget of USD 500 000, after approval by the Bureau later in the year.

5.1.2/96      Standing Committees Reporting to Council and Bureau

The Executive Secretary said that present practice was as indicated in the agendas for the 38th Council and 66th Bureau meetings at Guildford. However, at recent Assemblies CTC had sometimes reported to the Council and sometimes to the Bureau, according to the wishes of the then Officers of the Union. Dr. Eaton drew attention to the suggestion that, at future Assemblies, there should be a plenary session for all delegates, at which the President should give a "state-of-the-art" report (IUPAC Officers, Paris: 95.12.11). Dr. J. H. Williams said that no detailed planning had yet been made for such a session, which might be incorporated into a reformulated reception held for everyone on the evening of Day 3 of the Assembly, and with all participants seated. The Executive Committee left it for the President and Secretary General to decide which Standing Committees should report in writing and also speak to the Council and Bureau at Geneva, and whether the Division Presidents should all speak at the Council. Prof. Brown suggested that the Division Presidents' reports might be displayed early as posters prior to the Council meeting.

5.1.3/96      Cosponsorship with New Swiss Chemical Society of International Meeting of Chemical Society Presidents

The Secretary General spoke to his precirculated paper: no such meeting had been held in conjunction with the Guildford General Assembly, but was it worthwhile for IUPAC to initiate discussions about a meeting at Geneva? The President was in favour of reinstating a meeting, which could potentially be very important to IUPAC (e.g., reactions to AMP, purpose and need for IUPAC). Prof. Steyn was also in favour of exploiting the opportunity, but Prof. Ward cautioned not to overload the proceedings about IUPAC. The Executive Committee asked the Secretary General to ascertain from the Secretary of the New Swiss Chemical Society, if there was any interest for joint action at Geneva.

5.2/96      Scope of 36th Congress (Geneva, 1997 - Minute 4.9/95, 66th Bureau)

The completed Advance Information Questionnaire and First Circular had been precirculated. Profs. Jortner and G. Modena were members of the International Advisory Committee: Prof. Jortner confirmed that he had been consulted about the scientific programme, which was excellent and in line with the guidelines for future IUPAC Congresses (Appendix A to Minutes, 65th Bureau - Antwerp). The Executive Committee approved the scope of the Congress on behalf of the Council (Statute 13.1).

5.3/96      IUPAC Participation in International Celebration of Chemistry in 1999 (Minute 8.4/93, 118th Executive Committee - Newark)

The Secretary General spoke to his precirculated paper and the proposal of the American Chemical Society that the world's chemical societies might

cooperate to make 1999 a year of celebrating the accomplishments of chemistry. In addition, ICSU had proposed broader scientific celebrations in 1999. The President felt that, because the Union would hold its General Assembly at Berlin in 1999 at the time when Gesellschaft Deutscher Chemiker was also celebrating the 50th anniversary of its reconstituted Society, that might be an opportunity for a focal point for the International Chemistry Celebration in which European countries, in particular, could play a major role, and even capture the attention of sectors of the public. In addition, Prof. Fischli suggested that the involvement of COCI might be worthwhile. The Executive Committee declared itself in favour of the proposal, and the Secretary General was delegated to act accordingly.

## 6/96 IUPAC BODIES

### 6.1/96 Ratification of Memberships Approved by Correspondence

The appointments, which had been made through correspondence by the President since the 67th Bureau meeting (Appendix B), were ratified by the Executive Committee.

### 6.2/96 Nominations of New Members

The Executive Committee approved the proposed new memberships for the Editorial Advisory Boards of PAC, CI, and Monographs on Chemistry for the 21st Century, for CTC, and for IDCNS (Appendix C). In addition, it approved the nomination of Dr. M. V. Kisakürek as the Vice-Chairman of the Commission on Nomenclature of Organic Chemistry from the start of 1996 (Bylaw 4.303).

### 6.3/96 Change in Terms of Reference for Commission on High Temperature Materials and Solid State Chemistry

The Secretary General pointed out that the Officers felt (Paris, 95.12.11) all Division/Section Rules should be reviewed, when the divisional restructuring was completed, so that more uniformity could be incorporated. Accordingly, the Executive Committee decided to defer any action on changes, submitted for the terms of reference of the Commission on High Temperature Materials and Solid State Chemistry, until there was another coordinated request for Division/Section Presidents and Commission Chairmen to present such changes for all Commissions for approval by the Council (cf. Lisbon, 1993).

### 6.4/96 Current Programmes Database and Biennial Vice-Presidential Critical Assessment of Programmes and Projects

- (i) The Executive Secretary reported that detailed information from all IUPAC bodies on their existing and new projects had been requested in electronic format at/immediately after the Guildford Assembly. As this information at previous Assemblies had been supplied only as hard copy - and then poorly in many cases - it was perhaps not surprising that the electronic response was disastrous. A great deal of time had been spent by Secretariat staff after Guildford, trying to obtain missing and improved electronic input from many IUPAC bodies: however, in several cases there was no alternative other than to accept hard copy information. Dr. M. Williams was appalled at the unnecessary work needed from his staff: a main aim in creating the current programmes database (CPD), with electronic input directly from IUPAC bodies, was to compensate for the decrease in Secretariat staff now being implemented. The situation had been reviewed with the outgoing and incoming Secretaries General (Oxford, 95.12.08), when it was agreed not to press further those IUPAC bodies, which had failed to provide information to update the CPD, and a procedure was

agreed on how to proceed in the short term.

Dr. Becker would visit the Secretariat in mid-May, in order to examine the electronic provision of project information by IUPAC bodies, with a view to suggesting how it might be improved for the Geneva Assembly. Also, he would review the practice advocated in 1992 (Appendix B to Minutes, 62nd Bureau - Oxford) for new projects to be initiated in the even year before the Assembly and the use of external refereeing.

The Executive Committee noted that the updated CPD was now in a state for the current programmes section to be printed out camera ready for the new Handbook (Minute 8.1/96), and the complete CPD material could then be sent to Prof. Jortner for him to start the statutory biennial critical review of programmes and projects. Due to the delay, Prof. Jortner indicated that his review would concentrate on general aspects of IUPAC activities rather than on its detailed scientific work. No action was taken regarding the proposal of the previous Secretary General to stop the biennial Vice-Presidential critical assessment ("brain-storming" session of Executive Committee at Guildford, 95.08.07).

- (ii) The Executive Secretary pointed out that, although new project proposals from Commissions must be approved by the relevant Division President before they were accepted officially, there was no approval procedure as yet for new project proposals from Standing Committees. The Executive Committee resolved that, in future, proposals from Standing Committees should be approved on behalf of the EC (Bureau) by the President, in conjunction with the Secretary General and Treasurer as necessary.

Regarding proposals from CTC for the initiation of new projects on *Education in Chemistry and the Environment* and *Education in Chemistry and Human Health*, the President said that he required an elaboration of short-term goals to be achieved before he was ready to give his official approval. Prof. Brown enquired whether external refereeing was also needed in the case of Standing Committees, and Prof. Fischli said that, in principle, it was.

A proposal from the ad hoc Committee on Chemical Weapons Destruction Technologies for the initiation of a new project, *Independent Review of Existing Technologies for Destruction of Chemical Munitions*, was approved officially. No additional funds would be provided to the Committee, pending the outcome of its application for funding from the Compton Foundation Inc.

#### 6.5/96 Further Changes to Statutes and Bylaws

- (i) The Executive Committee gave its interim verdicts (Appendix D) on a series of matters raised by the Executive Secretary (96.04.04), which possibly needed Council approval for changes to the Statutes and Bylaws at Geneva in 1997. It requested the Secretary General to evaluate these matters further with the Executive Secretary, and to report back to the Executive Committee (Bureau) with recommendations on how to proceed.
- (ii) The Secretary General was concerned about the need to document and systematize the many policies and *modi operandi*, which had been established over the last five years by the Council, Bureau, Executive Committee, and possibly Division/Section Presidents. Accordingly, Dr. Becker had invited Dr. R. B. Fox, who had extensive experience in IUPAC in the Macromolecular Division and IDCNS and also

in the American Chemical Society in such matters, to make a systematic study on his behalf. The Executive Committee approved the action taken by Dr. Becker.

7/96      RELATIONS WITH OTHER ORGANIZATIONS

7.1/96      Change in Swiss National Adhering Organization

The Executive Committee noted that the duties and the member societies of the Schweizerisches Komitee für Chemie (SKCh) had gradually been taken over by the New Swiss Chemical Society (NSCS), and that SKCh had been wound up officially as of 95.12.31. On behalf of the Council (Bylaw 1), it accepted NSCS as the Swiss-NAO retrospectively to 96.01.01.

7.2/96      Application for Upgrading to Full Membership by Pakistan

Regarding an application (96.01.13) for the upgrading of the Chemical Society of Pakistan (CSP) from Observer Country status to full Membership of the Union, a subscription of about USD 2 500 was deemed applicable by the Finance Committee [Minute 5.1(iii)c/96]. The FC recommended that more up-to-date chemical turnover data should be sought from Pakistan, and that the requirements of Bylaw 1 might not need to be exercised in full. The Executive Committee agreed to recommend to the Bureau, that the request for upgrading should be accepted by the Council at Geneva, but that it must be done in full accordance with the requirements of Bylaw 1. If CSP wished to pay the anticipated USD 2 500 for 1998 before then, it should be allowed to do so. The Secretary General was invited to propose a change to Bylaw 1, so that any such application in future from an Observer Country might be handled more expeditiously [Minute 6.5(i)/96].

7.3/96      Application for Upgrading to Full Membership by Puerto Rico

The application from Colegio de Químicos de Puerto Rico for upgrading from Observer Country status to full Membership of the Union was deferred, because Puerto Rico presently held Commonwealth status of USA and was not therefore an independent country. The Secretary General agreed to seek a formal response from the US National Committee for IUPAC, to check whether Australia and Canada were independent countries (as opposed to being members of the British Commonwealth) when they had joined the Union, and to report back to the Bureau later in the year.

The Executive Secretary pointed out that, when Hong Kong reverted to being part of China in 1997, its status as an IUPAC Observer Country would need to be reviewed.

7.4/96      Change in Name for Association of Official Analytical Chemists

The Executive Committee noted that since 1991, the name of the Associated Organization had been AOAC INTERNATIONAL, and "Association of Official Analytical Chemists" was no longer used.

7.5/96      ICSU Matters

7.5.1/96      General Report

The President referred briefly to the deliberations of the 34th ICSU General Committee meeting (Chiang Mai, Thailand: 95.10.07-09), at which he had replaced Prof. den Boef as official representative of IUPAC (Minute 7.4/95, 121st Executive Committee). He stressed that an independent assessment was currently being made of the mission, organizational structure, and operative modes of ICSU.



The Executive Committee reviewed the earlier letters from IUPAC, supporting the applications of the International Union of Toxicology (Prof. A. J. Bard, 92.07.24) and of the International Union of Food Science and Technology (Prof. den Boef, 95.03.17) to be upgraded from Scientific Associates to full Scientific Union Members of ICSU. IUPAC had Commissions on Food Chemistry and on Toxicology, and there was collaboration with IUTOX in several ways. Concern was expressed at the continued diminishing power within ICSU of basic sciences like chemistry, physics, and mathematics, caused by the splitting of biology and geology into several separate Scientific Unions, each with full voting power. The President would inform ICSU that the scientific qualifications of IUTOX and IUFOST were undoubtedly very high, but that eventually regrouping of Scientific Union Members and Scientific Associates, and perhaps also other bodies, was desirable.

7.5.2/96      Collaboration with ICSU Scientific Committee on Problems of the Environment

- (i) A report on the discussions of Prof. Fischli with Profs. Ph. Bourdeau and V. A. Koptug, President and Vice-President respectively of SCOPE (Paris, 96.02.03) had been precirculated. Prof. Fischli indicated possibilities (Appendix E) for collaboration in the framework of ongoing SCOPE projects, which overlapped with areas of interest to IUPAC (1-3) and for potential new joint projects (4-9). The Executive Committee accepted the recommendation of Prof. Fischli to convene an exploratory meeting (Brussels/Paris/London or even Oxford in conjunction with the forthcoming Bureau meeting?) of Dr. Miyamoto (Division of Chemistry and the Environment), Dr. A. Hayes (CHEMRAWN Committee), and Dr. R.-P. Martin (COCI), with Prof. Bourdeau and even Prof. Koptug, to make a critical evaluation of how to proceed with possibilities 3, 4, 5, and 9. The Executive Secretary would relocate the original proposal to ICSU by Prof. T. S. West for possibility 7.
- (ii) Prof. Steyn reported briefly on his participation on behalf of IUPAC at a meeting of the Executive Committee of ICSU's Scientific Committee on Oceanic Research (Cape Town, 95.11.14-16). IUPAC had expertise on chemical processes on the macroscale and at the molecular level, whereas SCOR had much expertise and knowledge on chemical processes and distribution on the macro level. There seemed to be opportunities for mutually beneficial collaboration, arising from IUPAC's increasing interest in the chemistry of environmental processes. Prof. Steyn was awaiting the minutes of the meeting, in order to see how to implement joint collaboration.

7.6/96      JCAMP-DX Data Standards Project

The Executive Committee ratified an agreement reached by correspondence between IUPAC and the Joint Committee on Atomic and Molecular Physical Data (JCAMP), concerning responsibility from 96.01.01 for future work on the JCAMP-DX project. IUPAC had agreed to create a Working Party for JCAMP-DX Data Standards, and reporting to the Committee on Printed and Electronic Publications (CPEP), to provide for continuing evolution and development of these standards. A total of USD 10 000 was being provided for IUPAC to finance the activities of the Working Party, of which USD 4 000 had already been received in respect of 1996.

7.7/96      WHO Triennial Review of IUPAC's Nongovernmental Organization Status

The Executive Committee noted the positive outcome of the triennial review by WHO of IUPAC's nongovernmental organization status. With regard to preparation of a plan for mutual collaboration for the coming three-year period, the President asked the Executive Secretary to invite Dr. Miyamoto

and Prof. D. W. Moss to contact WHO's designated technical officers responsible for collaboration with IUPAC, Drs. C.-C. Heuck and M. M. Younes, in order to draw up a work plan, and to report back to the Bureau.

The President drew attention to the participation by Dr. Miyamoto on behalf of IUPAC in the Intersessional Group meeting of the Intergovernmental Forum on Chemical Safety [Canberra, 96.03.03-08: Minute 7.2(i)/95, 121st Executive Committee]. Prof. Fischli had subsequently written to WHO, expressing the opinion that IUPAC and other scientific nongovernmental organizations would be delighted to have the opportunity to show they had a lot to offer to WHO, both in unbiased opinion and balanced assessment standing firmly on scientific grounds. Furthermore, he had pointed out that the Union was feeling embarrassed that pressure groups, like Greenpeace, had a place at the table, but IUPAC and IUTOX did not.

7.8/96      Application for Membership by Union of Yugoslav Chemical Societies

The Executive Committee noted that the application for Membership from the Union of Yugoslav Chemical Societies (UYCS) was essentially in respect of the Chemical Societies of Serbia and Montenegro: at the end of 1992 UYCS, then including the Chemical Societies of Croatia and Slovenia, had ceased to be a Member of the Union, due to non-payment of subscriptions (Statute 9.2). It was resolved that UYCS must apply for Membership in full accordance with the requirements of Bylaw 1, and that a subscription of USD 2 000 should be levied until UYCS supplied some relevant chemical turnover data [Minute 5.1(iii)b/96, Finance Committee - Zürich].

7.9/96      Forum for Interorganizational Cooperation in Metrology

The Executive Committee ratified the agreement by the President for the Union to play an active role in the recently created Forum for Interorganizational Cooperation in Metrology (FICOM), noting that Prof. I. M. Mills would be the official representative during 1996-7.

8/96      PUBLICATIONS

8.1/96      IUPAC Handbook

The Executive Secretary reported that the camera-ready copy material for *IUPAC Handbook 1996-1997* was scheduled to be delivered to Blackwell Science at the end of April. Publication was expected during June, and copies would be distributed with the July issue of CI. Bearing in mind the requirements of the Data Protection Registrar in UK, the Executive Committee left it for the Secretary General to consider with Dr. M. Williams, whether to include addresses for persons detailed in the Handbook on the IUPAC home page on the WWW. It was noted that, in view of the poor response by Division/Section Officers to preparing revised Division/Section Rules at Guildford (Minute 3.4/95, 121st Executive Committee), this section of the Handbook - including terms of reference for Commissions (Minute 6.3/96) - would be omitted from the new Handbook.

8.2/96      ICSU-UNESCO Conference on Electronic Publishing in Science

The Secretary General reported briefly on his participation with Dr. D. H. M. Bowen (Chairman, CPEP) and Dr. J. H. Williams in the Conference at Paris (96.02.19-23), which he had found to be very useful.

9/96 SPONSORSHIP OF SYMPOSIA

9.1/96 Sponsorship of Symposia

The sponsorships of symposia (Appendix F), approved through correspondence by the Secretary General on behalf of the President since the 66th Bureau meeting, were ratified by the Executive Committee. Noting that organizers of some sponsored symposia were reluctant to grant to IUPAC Affiliates a 10% reduction or "own members" rate on the registration fee for scientific participants, the Secretary General was asked to consider how this might be "enforced".

9.2/96 Participation of Chemists from East European Countries

The recommendation of the Secretary General, to continue inviting organizers of IUPAC-sponsored symposia to consider applying student-level registration fees for East European chemists (Minute 5.3/92, 62nd Bureau - Oxford) throughout 1996 - in line with the related policy of the American Chemical Society - and then to review the situation once again, was approved.

10/96 DATES AND PLACE OF NEXT MEETING

At the request of Prof. Jortner, revised dates of Sunday-Monday, 6th-7th April, were agreed for the 1997 meeting of the Executive Committee at Jerusalem.

11/96 ANY OTHER BUSINESS

11.1/96 Meeting in Recognition of 1996 Nobel Prize Winner(s) in Chemistry

A suggestion from Prof. Jortner for IUPAC to organize a small one-day meeting in recognition of the 1996 Nobel Prize winner(s) in chemistry, to take place early in 1997, was approved by the Executive Committee. Profs. Fischli and Jortner agreed to initiate the arrangements.

VOTE OF THANKS

The President thanked the Executive Secretary and his staff for facilitating an effective and successful meeting, at which conclusions had been reached on several difficult matters. He then invited the Executive Committee to remain behind in closed session, in the absence of the Executive Secretary and his Deputy, in order to consider in some detail the implications of relocating the Secretariat during 1997.

\* \* \*

CHAIRMAN: \_\_\_\_\_

DATE: \_\_\_\_\_

APPENDIX A

IUPAC-UNESCO INTERNATIONAL CHEMISTRY COUNCIL (ICC)

(as at 96.01.01)

Dr. C. F. Garbers (Past-President, Council for Scientific and Industrial Research, Pretoria South Africa)

Prof. D. R. Hershbach (Nobel Prize Winner, Harvard University, Cambridge, MA, USA)

Dr. Y. Ito (Toray Industries Inc., Tokyo Japan)

Prof. J.-M. Lehn (Nobel Prize Winner, Université Louis Pasteur, Strasbourg, France)

Prof. A. C. Paladini (University of Buenos Aires, Argentina)

Prof. J. C. Polanyi (Nobel Prize Winner, University of Toronto, Canada)

Prof. Lord Porter (Nobel Prize Winner, Imperial College, London, UK)

Prof. H.-J. Quadbeck-Seeger (BASF AG, Ludwigshafen, FRG)

Prof. C. N. R. Rao (Indian Institute of Science, Bangalore, India)

MEMBERSHIPS APPROVED BY CORRESPONDENCE SINCE 67th BUREAU MEETINGI. STANDING COMMITTEESCHEMRAWN Committee

- |                          |  |
|--------------------------|--|
| Dr. P. M. Norling (USA)  | - Titular Member/Vice-Chairman (1996-1997) |
| Prof. P. Moyna (Uruguay) | - Titular Member (1996-1999)               |
| Mr. M. Kawamata (Japan)  | - Associate Member (1996-1999)             |

Committee on Printed and Electronic Publications

- |                                  |                              |
|----------------------------------|------------------------------|
| Prof. P. S. Steyn (South Africa) | - Titular Member (1996-1999) |
|----------------------------------|------------------------------|

Pure and Applied Chemistry - Editorial Advisory Board

- |                        |                               |
|------------------------|-------------------------------|
| Dr. Y. Wolman (Israel) | - Member/Chairman (1996-1997) |
|------------------------|-------------------------------|

Monographs on Chemistry for 21st Century - Editorial Advisory Board

- |                                 |                               |
|---------------------------------|-------------------------------|
| Prof. Irina Beletskaya (Russia) | - Member/Chairman (1996-1997) |
|---------------------------------|-------------------------------|

Committee on Teaching of Chemistry

- |                                    |                                       |
|------------------------------------|---------------------------------------|
| Prof. J. D. Bradley (South Africa) | - Titular Member/Chairman (1996-1999) |
|------------------------------------|---------------------------------------|

IUBMB-IUPAC Joint Commission on Biochemical Nomenclature

- |                            |   |
|----------------------------|---|
| Dr. B. Whyte (Switzerland) | - Titular Member/Secretary (1996-1999)    |
| Dr. A. R. Barrett (UK)     | - Titular Membership extended (1996-1999) |
| Prof. R. Cammack (UK)      | - Titular Member (1996-1999)              |

II. DIVISION/SECTION COMMITTEES AND COMMISSIONSPhysical Chemistry Division Committee

- |                          |                                |
|--------------------------|--------------------------------|
| Prof. T. Yoshida (Japan) | - Associate Member (1996-1997) |
|--------------------------|--------------------------------|

Commission on Chemical Kinetics

- |                          |                                |
|--------------------------|--------------------------------|
| Dr. T. Bérczes (Hungary) | - Associate Member (1996-1999) |
|--------------------------|--------------------------------|

Commission on Biophysical Chemistry

- |                             |                                |
|-----------------------------|--------------------------------|
| Prof. T. Kitagawa (Japan)   | - Associate Member (1996-1997) |
| Dr. T. R. Stouch (USA)      | - Associate Member (1996-1997) |
| Dr. D. R. Thévenot (France) | - Associate Member (1996-1997) |

Commission on High Temperature Materials and Solid State Chemistry

- |                               |                              |
|-------------------------------|------------------------------|
| Prof. J.-O. Carlsson (Sweden) | - Titular Member (1996-1999) |
|-------------------------------|------------------------------|

Prof. J. Livage (France)	- Titular Member (1996-1999)
Prof. B. Lux (Austria)	- Associate Member (1996-1999)
Prof. H. Verweij (Netherlands)	- Associate Member (1996-1999)

#### Macromolecular Division Committee

Prof. I. Ando (Japan)	- Associate Member (1996-1997)
Dr. P. Céfelin (Czech Republic)	- Associate Member (1996-1997)
Prof. A. R. Khokhlov (Russia)	- Associate Member (1996-1997)
Prof. S. Russo (Italy)	- Associate Member (1996-1997)
Prof. S. Polowinski (Poland)	- Associate Member (1996-1997)

#### Analytical Chemistry Division Committee

Dr. A. Gelencsér (Hungary)	- Associate Member (1996-1997)
Dr. L. D. Pettit (UK)	- Associate Member (1996-1997)

#### Commission on Equilibrium Data

Prof. R. Ramette (USA)	- Titular Member (1996-1997)
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#### Commission on Fundamental Environmental Chemistry

Prof. L. Charlet (France)	- Associate Member (1996-1997)
Prof. R. M. Harrison (UK)	- Associate Member (1994-1997) reconfirmed
Prof. G. G. Leppard (Canada)	- Associate Membership extended (1989-1997)
Dr. L. A. Nelson (UK)	- Associate Member (1996-1997)
Prof. C. R. O'Melia (USA)	- Associate Membership extended (1991-1997)
Prof. G. Sposito (USA)	- Associate Membership extended (1989-1997)
Prof. A. Tessier (Canada)	- Associate Member (1989-1997) reconfirmed
Prof. A. J. B. Zehnder (Switzerland)	- Associate Member (1996-1997), subject to NAO approval

#### Chemistry and Human Health Division Committee

Prof. D. W. Moss (UK)	- President (1996-1999)
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#### Commission on Nomenclature, Properties, and Units (Clinical Chemistry)

Dr. R. Dybkaer (Denmark)	- Titular Member (1996-1997)
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#### Commission on Nomenclature and Terminology (Medicinal Chemistry)

Dr. E. M. Gordon (USA)	- Associate Member (1996-1999)
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#### Commission on New Technologies and Special Topics (Medicinal Chemistry)

Prof. B. D. Anderson (USA)	- Associate Member (1996-1999)
Dr. J. C. Jaen (USA)	- Associate Member (1996-1999)
Dr. B. K. Trivedi (USA)	- Associate Member (1996-1999)

### III. POOL TITULAR MEMBERSHIP

#### Analytical and Physical Chemistry of Soils

Prof. P. M. Huang (USA)	- Titular Member (1996-1997)
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FURTHER CHANGES TO STATUTES AND BYLAWS

1. Necessity for NAO approval of appointments to Division/Section Committees and Commissions - see Agenda Item 2.2.1?

- low priority for change, and Prof. Brown felt that existing practice should be continued.

2. Initial term of appointment of TMs and AMs (Minute 11/95, 67th Bureau - Guildford) -

"In view of the large number of requests for the initial term of service of new Titular and especially Associate Members of Commissions to be for two years only [see (ii) above], the Secretary General suggested that Bylaw 4.304 should be amended accordingly."

- in favour of the change.

3. Filling vacancies amongst Officers of the Union and in Bureau [Minute 13.1(i)/95, 67th Bureau - Guildford] -

"In view of the insistence in Council at Guildford of observing the statutory requirement for a written and secret ballot to fill the vacancies for IUPAC Officers, although there was only a single candidate for each position, Prof. Brown suggested that Bylaw 2.222 (line 2, second paragraph : *Statutes and Bylaws* precirculated to NAOs on 95.07.11) should be changed to read:

*"defined by the Statutes, shall, save in the case that the number of nominations is no more than the number of vacancies - when the candidates shall be declared elected unopposed -, be elected at a regular meeting of the"*

- defer any change for the present: there might be other ways of improving the practicalities at Geneva.

4. Make provision for Observer Country status of the Union: it had existed ad hoc since 1982 (Minute 9.2/82, 46th Bureau - Prague)?

- in favour of the change.

5. Necessity to define future role of Sections in the Union: they are presently regarded as "embryo" Divisions?

- defer any change for the present.

6. Necessity to extend Bylaw 4.103, second paragraph, to all Officers of the Union (i.e., to include also Past-President)?

- in favour of the change.

7. Necessity to change last sentence, first paragraph, Bylaw 4.103, so that twelve years limitation applies to total service as TM and AM [cf. Commissions - Bylaw 4.304(iii)]?

- in favour of the change.

POSSIBLE AREAS OF SCOPE-IUPAC COLLABORATION

1. SCOPE Scientific Group on Methodologies for the Safety Evaluation of Chemicals (SGOMSEC) - this activity was effectively in the hands of WHO's International Programme on Chemical Safety, in which IUPAC was already participating.
2. Mercury Cycling in Ecosystems - there was hesitancy that IUPAC could contribute to preparation of a review report devoted to the development of mercury determination methods applied to atmosphere, water, soil, and biological tissues, with reestimation of the accuracy of the methods used during the last twenty years, in order to make compatible the data published during this period.
3. Radiation from Nuclear Test Explosions (RADTEST) - possible participation in the hard problem of safe disposal of radioactive waste through a CHEMRAWN Conference, critically evaluating the information already available, and leading to publication of perspectives and recommendations.
4. Remediation of Sites Contaminated by Toxic Heavy Elements and Organic Substances (e.g., halogenated dioxines) - a 1996-7 IUPAC Pool project (not yet implemented) and a subject under consideration for a future CHEMRAWN Conference.
5. Oil Spill Clean-up and Remediation - an active 1996-7 IUPAC Pool project and a subject of possible interest to COCI.
6. Waste Problems and Perspectives for Their Solution - related to CHEMRAWN IX: World Conference on the Role of Advanced Materials in Sustainable Development - Sustainable Production, Use, Disposal, and Recycling of Materials (Seoul, 96.09.01-06).
7. Alternative Scenarios for Energy Production in the Future and the Role of Science for their Realization - an active 1996-7 IUPAC Pool project.
8. Today's Possibilities and Perspectives of Replacement of Non-renewable Raw Materials by Renewable Ones (including the problems of chemistry of natural products) - possibly some relevant activities already in IUPAC?
9. Chemistry and Biology for Sustainable Agriculture (Food Security) - possible interaction with IUPAC Commission on Food Chemistry?

**SPONSORSHIPS OF SYMPOSIA BY IUPAC APPROVED BY CORRESPONDENCE**  
**SINCE 66th BUREAU MEETING**

(see Conference Calendar in *Chemistry International* for main organizers)

7-12 July 1996. 17th International Conference on Organometallic Chemistry. Brisbane, Australia.

21-26 July 1996. 16th IUPAC Symposium on Photochemistry. Helsinki, Finland.

21-26 July 1996. 18th International Carbohydrate Symposium. Milan, Italy.

18-23 August 1996. 11th International Conference on Carotenoids. Leiden, Netherlands.

9-12 September 1996. 14th International Symposium on Medicinal Chemistry. Maastricht, Netherlands.

11-13 September 1996. International Symposium on Food Packaging: Ensuring Safety and Quality of Foods. Budapest, Hungary.

14-17 October 1996. International Workshop "Pesticide Use and Environmental Safety in Latin America". Sao Paulo, Brazil.

5-8 January 1997. International Symposium on Chemical and Biological Thermodynamics. Amritsar, India.

13-17 April 1997. 3rd IUPAC Workshop on Safety in Chemical Production: Environmentally Sustainable Manufacture of Competitive Products. San Francisco, California, USA.

1-6 June 1997. 4th International Symposium on Bioorganic Chemistry. Biarritz, France.

18-22 August 1997. 13th International Symposium on Plasma Chemistry. Beijing, China.

21-26 September 1997. 30th Colloquium Spectroscopicum Internationale. Melbourne, Australia.

23-26 September 1997. 2nd World Congress on Emulsions: Industrial Applications of Emulsions. Bordeaux, France.

30 June - 4 July 1998. 12th International Conference on Organic Synthesis. Venice, Italy.

23-28 August 1998. 14th International Conference on Physical Organic Chemistry. Florianópolis, Santa Catarina, Brazil.

9-14 July 2000. MACRO 2000: International Symposium on Macromolecules. Warsaw, Poland.

3-8 September 2000. 11th International Biotechnology Symposium. Berlin, Federal Republic of Germany.

\* \* \*

4-8 November 1996. International Symposium on Industrial Application of the Mössbauer Effect. Johannesburg, South Africa.

- sponsorship offered by IUPAC, but not accepted by organizers due to no financial support provided by the Union

