

MINUTES OF 120th EXECUTIVE COMMITTEE MEETING

Lady Margaret Hall, Oxford, UK: 16th-17th April 1994

Present: Prof. K. I. Zamaraev (Chairman), Prof. A. J. Bard, Prof. G. den Boef, Prof. R. D. Brown, Dr. D. F. Eaton, Prof. A. E. Fischli, Prof. J. Jortner, Prof. J. M. Ward - in part

In Attendance: Dr. M. Williams (Executive Secretary), Miss A. Troughton (Deputy Executive Secretary) - in part

1/94 INTRODUCTORY REMARKS AND FINALIZATION OF AGENDA

The following items were added to the agenda circulated by the Executive Secretary (94.04.05):

- 3.13 Corrections and Amendments re Appointments of New Members
- 6.4 Possible New Directions

2/94 MINUTES OF 118th AND 119th MEETINGS OF EXECUTIVE COMMITTEE

2.1/94 Amendments and Approval of Minutes

The minutes of the meetings at Newark (circulated by the Executive Secretary 93.06.24) and at Lisbon (circulated by the Executive Secretary 94.04.05) were approved, subject to:

- (i) addition of the following wording to the third paragraph of Minute 6.2/93, 118th Meeting

"In his Assessment Prof. Staab had expressed strong dissatisfaction with the current programmes of the Clinical Chemistry Division (particularly page 145, line 21 onwards) and Medicinal Chemistry Section (particularly page 48, line 1 onwards). This matter should be drawn to the attention of the Bureau during its discussion of the Assessment at Lisbon."

- (ii) inclusion of the correct material under Appendix D, 118th Meeting (Official Representatives to IUPAC-sponsored Symposia Approved by Correspondence since 62nd Bureau Meeting)

- (iii) rewording the first sentence of Minute 15.1/93, 119th Meeting

"Unexpectedly, Prof. K. L. Komarek had mentioned unofficially to the Bureau earlier that afternoon (Minute 14.1/93, 64th Meeting), that dissolution..."

2.2/94 Matters Arising

2.2.1/94 IUPAC-IUPAP Transfermium Working Group  
(Minute 3.2/93, 118th Meeting)

The President reported that the Phase (ii) report - Discovery of the Transfermium Elements - and the responses from the laboratories at Berkeley, Darmstadt, and Dubna, together with a short additional statement from TFWG, had been duly published in the August 1993 issue of PAC, a copy of which was available at the meeting. Profs. N. N. Greenwood and Y. P. Jeannin, the two IUPAC nominees to TFWG, had recently expressed their concern (94.03.28) at the continued lack of a formal response by IUPAC to the Phase (ii) report. After an extended discussion, the Executive Committee endorsed the report and

additional statement as published in PAC. Profs. Greenwood and Jeannin and the Officers of the Commission on Nomenclature of Inorganic Chemistry (II.2) would be notified accordingly by the President.

Prof. Zamaraev had requested (94.01.28) Commission II.2, at its meeting at Lake Balaton, Hungary (94.08.30-09.02), to consider the Phase (ii) report as the main item on the agenda and to submit its recommendations on names for the transfermium elements to the Bureau at Antwerp (94.09.17-18).

2.2.2/94 Fullerene Nomenclature and Terminology  
(Minute 3.3./93, 118th Meeting)

The Interdivisional Committee on Nomenclature and Symbols at Lisbon (Minute 4.2.7) had reviewed progress made by the Working Party on Fullerene Nomenclature. A new draft would be circulated for comment by various experts. Chemical Abstracts Service was being contacted over the work it had already carried out. IDCNS had accepted the need for urgent action in this area, and agreed that an accelerated approval procedure was appropriate. Public review would not be required. Subject to satisfactory review by the experts, the revised recommendations would be published simultaneously in PAC and *Fullerene Science and Technology*.

CAS had duly commented extensively on the new draft: there were marked differences in approach (especially in numbering) between IUPAC and CAS, which would certainly confuse the scientific community. Accordingly, IDCNS had suggested that there should be an account of both IUPAC and CAS recommended systems in the final document, and some attempt made to justify the IUPAC recommendations. Publication might otherwise be postponed, pending further discussion of the problems when the Commission on Nomenclature of Organic Chemistry met later in the year. The views of the Commission Chairman, Prof. H. A. Favre, were awaited.

Depending on the reply of Prof. Favre, Prof. Ward suggested that an interim statement might be issued in CI. Prof. Bard agreed to contact CAS about its inability to reach agreement with the Union on the matter.

2.2.3/94 Collaboration with UNESCO  
(Minute 4.3.1/93, 118th Meeting; Minute 8.3/93, 63rd Bureau)

Profs. den Boef and Fischli reported on developments since Lisbon. An ad hoc Coordinating Council for Chemistry had been established with Prof. Fischli as Chairman, to supervise joint IUPAC-UNESCO activities, particularly an International Programme on Chemistry for Life to be carried out in conjunction with CHEMRAWN (USD 72 000). In addition, IUPAC had submitted proposals in accordance with UNESCO's newly defined priorities of least developed countries, Africa, women, and rural areas. Additional funding (USD 25 000, and eventually possibly 90 000) had been agreed for these purposes, when Prof. den Boef met UNESCO Assistant Director-General A. Badran. Some of the surplus IUPAC requests for ICSU grants in 1995 might be handled through this mechanism. Prof. Fischli mentioned that an IUPAC-UNESCO-UNIDO Committee on the Training (previously termed Fellowships) Programme for Safety and Environmental Protection in Chemical Production planned to produce a leaflet, following up the recent success of the first round of in-depth training of four scientists from developing countries. He was due to meet UNESCO Director General F. Mayor shortly, in order to promote further cooperation between UNESCO and IUPAC. It was noted that the IUPAC Information Officer, Dr. M. H. Freemantle, had assumed a key role in the cooperation with UNESCO, but alternative arrangements would be necessary when he left the employment of the Union [Minute 11(i)/94].

Prof. Brown felt that these developments were important for the image of IUPAC, and Prof. Bard proposed that they should be publicized in *CI* and *Chem. Eng. News*. Prof. Jortner suggested that a programme of travel fellowships for research students from developing countries to relevant IUPAC-sponsored symposia might be introduced with UNESCO funding. According to Prof. Brown, such a programme already existed for the International Astronomical Union.

2.2.4/94 Chemistry and Advance Materials Programme  
(Minute 15.1/93, 119th Meeting)

Written confirmation (93.09.02) had been received from Prof. K. L. Komarek of the recommendation to dissolve the Coordinating Committee on Chemistry and Advanced Materials Programme. It was accepted by the Executive Committee, which noted a difficulty to establish interdivisional projects in this area. However, advanced materials projects already existing in various Commissions should be allowed to continue to completion.

The President suggested that a Bureau Member might be invited to compile a listing of existing IUPAC advanced materials projects. In view of the difficulty to establish interdivisional coordination in this field, however, Prof. den Boef was doubtful if it was worthwhile to try and implement the suggestion. Prof. Fischli preferred to reconsider the matter in conjunction with his ideas on structural changes for the Union (Minute 6.3/94). Prof. Bard agreed that there was an inherent difficulty with the present structure for IUPAC to react positively and urgently to new emerging areas, such as nanochemistry. Perhaps another attempt should be made to collaborate with the International Union for Materials Research (Minute 6.2/90, 114th Executive Committee - Athens). The Secretary General was concerned that all new initiatives within the Union inevitably brought more work for the Secretariat, because existing activities were seldom stopped.

3/94 MINUTES OF 63rd and 64th MEETINGS OF BUREAU AND MATTERS ARISING

The minutes of the meetings at Lisbon (circulated by the Executive Secretary 94.03.08 and tabled in Oxford, respectively) were recorded as having been received officially by the Executive Committee.

3.1/94 Publicity Brochures for IUPAC  
(Minute 3.2.5/93, 63rd Bureau; Minute 3(v)/94, Finance Committee)

The latest versions of the two brochures were tabled by Prof. Fischli, who indicated probable photographs to be included. Printing of 12 000 copies of each in UK was estimated to cost a total of GBP 8 000, with a further GBP 800 required for postage from the Secretariat. The Executive Committee accepted his recommendation to print them in Switzerland (about USD 8 400), but to distribute from Oxford. Dr. Freemantle had proposed a detailed plan for distribution, which needed to be carefully re-evaluated (in view of the small additional cost, a print run of 15 000 was agreed, but copies should not be sent to members of IUPAC bodies; display at Chemistry for Life events in 1994 should be considered).

The Executive Committee was grateful that the expenses of producing mock-ups and final artwork for the brochures were kindly borne by chemical industry. An earlier proposal from the Treasurer to meet the printing/distribution costs from reserves (about USD 10 000), the wording and format of the brochures, and the use of a simplified IUPAC logo on this occasion, were all approved. However, there was general agreement not to replace the well established logo of the Union. Despite a continuing recession in the chemical industry in many parts of the world, the Executive

Committee concluded that dissemination of the brochures should not be delayed.

3.2/94 Changes to Statutes and Bylaws  
[Minutes 3.2.6 and 3.2.9(ii)/93, 63rd Bureau]

- (i) Deletion of "by registered mail" from lines 2-3 of Bylaw 2.25 (*IUPAC Handbook 1991-1993*, page 199) should be included in recommendations to the Bureau for changes to Statutes and Bylaws, which would be sent to NAOs before 94.10.10.
- (ii) Before drafting the changes to distinguish, in future, solely between Members and Associate Members for all IUPAC bodies, the Secretary General sought clarification whether Associate Members should have full voting rights or only on scientific matters. After careful consideration of the implications and noting a letter from Prof. N. J. Leonard (93.08.30), the Executive Committee declared itself in favour of full voting rights, subject to nominees for either category of membership absenting themselves from the room while their candidacy was discussed and election took place. However, there was no support for a suggestion from Spain (37th Council - Lisbon, Any Other Business), that National Representatives should be granted any voting responsibility. Prof. Bard queried whether Commissions should continue to nominate their new membership, or whether members (experts) should be proposed by Division/Section Committees when each new project was initiated.

3.3/94 Review of Affiliate Membership Programme  
(Minute 3.2.10/93, 63rd Bureau)

Prof. Ward reported that the AMP Review Group had met in London (94.03.25). Further work was being carried out, with the intention to present its conclusions to the Bureau at Antwerp.

3.4/94 Guidelines for IUPAC Representation  
(Minute 3.2.11/93, 63rd Bureau)

A clause, dealing with the need for a representative to be properly briefed before attending a meeting, had been drafted by Dr. A. Hayes. It was accepted by the Executive Committee for inclusion in the Guidelines already approved, subject to time permitting such briefing to take place (Appendix A).

3.5/94 Assignment of Votes to Delegations in Council  
[Minute 4.1(ii)/93, 63rd Bureau]

The Secretary General elaborated briefly on his precirculated proposal, which attempted to assign a higher influence in the voting to countries with a very high subscription, but without a need for statutory change. The present voting/subscription levels were introduced at Lyon (1985), but they had never been updated for inflation and were now unrealistic. An adaptation was agreed by the Executive Committee (Appendix B), which would be disseminated to NAOs, so that they could express their views in writing before the Bureau meeting at Antwerp.

3.6/94 Critical Assessment of Prof. Staab  
[Minute 4.5(ii)/93, 63rd Bureau]

The Executive Committee considered the follow-up paper, drafted by the Secretary General and focussed on Part I of the Assessment. It was agreed to await the outcome of the AMP review (Minute 3.3/94) before discussing the

future of CI. The IUPAC Congress was scheduled for consideration later in the meeting (Minute 3.9/94), together with a relevant letter from the Australian National Committee for Chemistry (94.02.17). Regarding the possible splitting of PAC into two parts, Dr. E. D. Becker had drawn attention to coverage of the suggestion in the minutes of the Publications Committee and PAC-EAB meetings at Lisbon: there was no support for the suggestion. Prof. den Boef agreed that there should be a stronger influence for chemistry in the affairs of ICSU, and his statement to ICSU (93.11.23) was an attempt to improve the low profile of the basic sciences within ICSU. Prof. Fischli preferred to await the outcome of the various Chemistry for Life events being coordinated in 1994 by the Committee on Chemistry and Industry (COCI), before deciding whether to create a small committee on image-building of chemistry.

The Executive Committee decided to present the Secretary General's follow-up paper, together with the minuted discussion thereof, for consideration by the Bureau at Antwerp.

3.7/94            Proposal for Commission on Biophysical Chemistry  
                  [Minute 4.5(iii)/93, 63rd Bureau]

At Lisbon consideration was deferred of a proposal to establish a new Commission on Biophysical Chemistry. The Executive Committee agreed that, in principle, such a Commission might be created at Guildford from within the zero-sum of Titular Members for the Physical Chemistry Division or even by allocation from the enlarged Pool of twenty-four TMs (cf. Minute 6.1/94). Also relevant was the suggestion by Prof. Fischli in his draft Critical Assessment (Minute 6.3/94) for there to be a better focus within IUPAC on biochemistry in general: biochemical activities already existed in several other Divisions of the Union in addition to Physical Chemistry.

3.8/94            Status of Associated Organizations  
                  [Minute 4.9(ii)/93, 63rd Bureau]

The Executive Committee noted that, at the deadline of 93.10.31, thirty-one organizations had provided satisfactory four-year review reports and paid their 1993 service charge. However, the AO status of six organizations had been withdrawn:

Chemical Society of the South Pacific  
Federación Latinoamericana de Asociaciones Químicas  
Groupement pour l'Avancement des Méthodes Spectroscopiques et  
Physico-Chimiques d'Analyse  
International Association for Advancement of High Pressure Science  
and Technology  
International Committee for Science of Photography  
Union of Arab Chemists

3.9/94            Position Paper on IUPAC Congress  
                  [Minute 4.8(i)/93, 63rd Bureau]

Prof. Jortner indicated a few corrections to the precirculated position paper, prepared by Prof. G. Modena and himself. Prof. Ward questioned whether an organizing NAO would be willing to finance a meeting of the proposed International Advisory Board, which would dictate the policy and scientific programme: perhaps only three persons suggested by the NAO and three by the Bureau needed to meet. In the opinion of Prof. Brown, the concept of an IAB and a Local Organizing Committee was already well established for international scientific meetings: such principles should be applied already for the Congress in 1997. Prof. Bard referred to the idea of the American Chemical Society for a World Chemistry Celebration in 1999

(Minute 8.4/93, 118th Executive Committee), which might be incorporated in a one-off IUPAC Congress. Prof. Zamaraev felt that it would be worthwhile to feature recent Nobel Prize chemistry recipients at the Congress, and even to assemble a theme around them. Prof. den Boef was anxious to retain the name of IUPAC with the Congress: perhaps there should be a Scientific Committee instead of an IAB; there should be a focus on good monodisciplinary as well as interdisciplinary topics; could one define the frontiers in chemistry four years ahead of a Congress?; if the Congress and General Assembly were to be held back-to-back, the Congress should be first in order to limit the waiting days for participants in both events; alternatively, the Congress might take place in even-years.

The Executive Committee invited Prof. Jortner to update the position paper for the Bureau at Antwerp. However, it should be brought immediately to the attention of the Brazilian Chemistry Committee for IUPAC in respect of the 1997 Congress at Rio de Janeiro.

3.10/94      Recommended Policies and Procedures for Handling Copyright in IUPAC Projects (Minute 5.3/93, 63rd Bureau)

The Executive Secretary said that adoption of the Recommended Policies by the Bureau had been delayed, due to deferment of the workshop on chemical databases and a misunderstanding with the Chairman of the Publications Committee. When the only comment arising from circulation of the recommendations to IUPAC bodies had been referred to Dr. E. D. Becker, no reply had been received on how to proceed. It was now clear (94.04.06), that no modifications were needed. The Project Initiation Form should indicate if publications were expected to arise from a project (hard copy or database), and any potential copyright problems should be identified at that time and dealt with by the Scientific Publications Secretary, Mr. P. D. Gujral. Prof. Bard wished to suggest some amendments to the recommendations before they were published in the IUPAC Handbook.

3.11/94      Ethics in Modern Science (Minute 6.1/93, 63rd Bureau)

Prof. Jortner reported that few comments had been received, when the two position papers had been circulated within the subcommittee after Lisbon. Prof. Bard felt that IUPAC should now undertake to formulate the explicit ethical guidelines and codes of conduct pertaining to chemical research. He proposed that the writing responsibilities should be divided into social responsibilities of scientists (Prof. Jortner), ethics in the conduct of research (Prof. M. T. Beck), and ethics in the publication of research (himself). Drafts should be exchanged before the Bureau meeting at Antwerp, when a decision could be taken on how to proceed to a final version at the General Assembly in Guildford. Also, Prof. Jortner would publish his initial paper in CI, and request comments from the readers.

3.12/94      Overviews of Most Important Chemical Issues  
(Minute 8.2/93, 63rd Bureau)

The initiative of Prof. Bard whereby, at the last even-year Bureau meeting, the Presidents of the Physical Chemistry and Organic Chemistry Divisions had presented brief overviews on the most important scientific issues which had arisen in their fields, was reviewed. The Executive Committee approved a suggestion from Prof. Zamaraev, to invite the Presidents of the Macromolecular and Clinical Chemistry Divisions each to present two-three "hot spot" areas at Antwerp, and for them to publish their material afterwards in CI.

3.13/94 Corrections and Amendments re Appointments of New Members  
(Minute 11/93, 64th Bureau)

Corrections and amendments (as at 94.04.14) to the information, supplied at Lisbon re appointment of new members to Division/Section Committees and Commissions, were noted by the Executive Committee. A listing of multiple IUPAC commitments, prepared by the Deputy Executive Secretary, indicated that there were no serious transgressions of the policy for persons to limit themselves to three commitments (Statute 4.2). The Secretary General felt that it was no longer necessary for the Secretariat to compile such a listing.

Prof. Bard was concerned at the large number of membership extensions approved by the Bureau for exceptional reasons at Lisbon. In future, he hoped that such statutory exceptions would be more restricted. Also, he asked that the scientific reason for each extension should be presented in writing to the Deputy Executive Secretary in advance of the General Assembly.

The Secretary General drew attention to the concern of the Commission on Environmental Analytical Chemistry (93.12.01) about a Bylaw change at Lisbon, whereby the appointment of a National Representative to a Commission was no longer permitted, if it already had a Titular or Associate Member from the same NAO. However, if Prof. den Boef judged the situation to warrant such an appointment, he usually granted special permission on behalf of the Bureau.

4/94 MINUTES OF MEETINGS OF STANDING COMMITTEES

Minutes were recorded as having been received officially by the Executive Committee from meetings of the Committee on Publications (Lisbon, 93.08.05-07), Committee on Chemical Databases (Lisbon, 93.08.06 and London, 93.12.05), Committee on Teaching of Chemistry (Lisbon, 93.08.06-07), Division/Section Presidents (Lisbon, 93.08.07), CHEMRAWN Committee (Lisbon, 93.08.08), Environmental Chemistry Matters (Lisbon, 93.08.08), Committee on Chemistry and Industry (Lisbon, 93.08.08-09), Committee on Affiliate Membership (Lisbon, 93.08.09), Interdivisional Committee on Nomenclature and Symbols (Lisbon, 93.08.09-10), and Finance Committee (Zürich, 94.02.21).

4.1/94 Matter Arising from Interdivisional Committee on Nomenclature and Symbols

4.1.1/94 International Vocabulary of Basic and General Terms in Metrology  
(Minute 5.1.4)

The Executive Secretary displayed copies of the recently published second edition of the Vocabulary (VIM-2) and the *Guide to the Expression of Uncertainty in Measurement*. IUPAC had provided chemical input to the common terminology now agreed by the four main international organizations concerned with metrology (BIPM, IEC, ISO, and OIML). A summary version of the Guide for chemists needed to be prepared by IUPAC.

4.2/94 Matters Arising from Finance Committee

4.2.1/94 Tightening Sanctions for Countries with Outstanding Subscriptions (Minute 3.1/94)

In response to the earlier acceptance by the Executive Committee of the need to tighten sanctions (Minute 4.6.5/93, 118th Meeting), the Treasurer recommended that the following changes should be made to Statute 9.2 (*IUPAC Handbook 1991-1993*, page 195):

- (i) In line 2, replace "after 31 December of the year during which the subscription was payable," by "from the due date,".
- (ii) In line 5, replace "thirty-six" by "twenty-four".

The Executive Committee agreed that these recommendations should be brought to the attention of the Bureau at Antwerp.

Prof. Ward had reconsidered specific proposals by the Finance Committee for the introduction of surcharges and discounts during the year of subscription payment. He suggested that the proposals should be deferred until the changes to Statute 9.2 were implemented at Guildford.

#### 4.2.2/94 Suggestion to Revert to Biennial Audit (Minute 3.2/94)

In view of misgivings about reverting to a biennial audit, expressed by the Secretariat and the Union's management accounts adviser, the Treasurer said that this suggestion had been abandoned by the Finance Committee. Also, he doubted if it was worthwhile for the Union to undertake a serious review every five years of the appointed auditors.

#### 4.2.3/94 Statement of Accounts for 1993 (Minute 4.1/94)

The Treasurer commented on various aspects of the 1993 accounts which, after several years of substantial deficits, showed a small surplus (USD 22 629) compared with a budgeted deficit (USD 100 500). Part of the difference resulted from stringent control of expenses together with some good fortune, and part arose from the accounting policy of allocating the total biennial expenses of IUPAC bodies to the even year. On the basis of figures for the past three biennia, the Finance Committee recommended that, for future budgets, the monies for IUPAC bodies should be divided 70:30 between the even and odd years. For 1992-3 the deficit was USD 49 800, compared with a deficit of USD 149 400 in 1990-1. Prof. Ward drew attention to an underspend of about USD 55 800 on the biennial budget provision for IUPAC bodies programmes, of which about USD 29 200 was in respect of the Divisions/Section. He would point this out to the Divisions/Section, and ask them to ensure that they made full full use of their allocations: the Division/Section Presidents received regular information from the Secretariat on their expenditures, and they should monitor the situation more critically. The Executive Committee agreed that the audited accounts for 1993 should be presented to Council at Guildford.

#### 4.2.4/94 Future Management of IUPAC Investment Portfolio and Cash Account (Minute 6.2/94)

The Treasurer summarized the considerations by the Finance Committee on alternatives to Union Bank of Switzerland with respect to both the IUPAC investment portfolio and cash account. Merrill Lynch (USA) was favoured by Prof. Ward: it obtained better investment returns than UBS, its charges were less, it could provide commercial banking facilities, communication was easier and quicker, and the Union had a tax-free status in USA. Further information was being sought from ML about the costs of expediting payments by bank transfer and about immediate acceptance of its cheques throughout the world. Another possibility was to stay with UBS, but to change the portfolio manager there. The Executive Committee delegated authority to the Finance Committee to change the IUPAC banker, should the Treasurer and Secretariat be fully satisfied by the further information from ML.



4.2.5/94 Review of Approved IUPAC Budgets for 1994-5 and Draft Capital Budget for 1994 (Minute 7/94)

- (i) Revised IUPAC budgets for 1994 and 1995 (as of 94.02.08) were noted by the Executive Committee. Major changes were introduction of the IUPAC bodies programmes split of 70:30 between the two years (Minute 4.2.3/94), increased costs for CI for members, and a lower forecast expenditure for the Guildford General Assembly. However, the revised biennial deficit forecast of USD 58 500 was relatively little changed from USD 61 500 at Lisbon.
- (ii) The Treasurer said that the move towards computerization of the Secretariat some ten years ago continued to require significant further finance, and the advice of the Committee on Chemical Databases was being sought on hardware and software problems in development of a computer network [Minute 11(ii)/94]. The draft capital budget for 1994 was approved by the Executive Committee, subject to appropriate items being set against unused BSP travel grant monies. In view of the currently strong status of the IUPAC reserves, a recommendation was accepted to bring forward to 1994 up to USD 3 000 more urgent expenditures foreseen in 1995.

4.2.6/94 Committee Membership (Minute 8/94)

Prof. Ward gave notice that he would not be seeking reappointment as Treasurer for a second term at the end of 1995.

5/94 FUTURE GENERAL ASSEMBLIES AND CONGRESSES  
(Miss Troughton in attendance)

5.1/94 38th General Assembly (Guildford, 1995)

The draft Information Booklet as presently available, together with the reservation form for accommodation, meals, and social events, was tabled by Miss Troughton, and comments invited from Executive Committee members by 94.04.30. The Treasurer presented costs for various campus accommodation, including lunch and dinner, at the University of Surrey. His recommendation for a per diem of GBP 40 (about USD 60) was approved. The accommodation and meals were subject to value added tax, which would be charged by the University, but could be reclaimed subsequently by the Union. The estimated total subsistence for Guildford was USD 94 000, significantly less than at either Hamburg or Lisbon. The revised budget total of USD 490 000 for the Assembly was probably too high, unless the USD weakened in the interim. Local travel to/from London Heathrow airport would cost about GBP 20.

5.2/94 39th General Assembly/36th Congress (1997)

As requested by Council (Agenda item 21, 37th Meeting - Lisbon), Miss Troughton presented cost estimates for subsistence and travel for Rio de Janeiro (Brazil) and Graz (Austria) as possible locations for the General Assembly. With an overall total of about USD 480 500, Graz was about USD 54 000 less than Rio de Janeiro. For Rio additional subsistence might be required for waiting days (VARIG did not have daily flights) and for the majority of attendees needing time to recuperate from long flights. Also, by using lower category hotels, the subsistence costs could be decreased for Graz. Accordingly, Graz might eventually cost less than Rio by USD 50 000-100 000.

Noting that 1997 would be the 75th anniversary of Associação Brasileira Química, Council at Lisbon had accepted an invitation from Brazil for the

Congress to be located in Rio de Janeiro. Because it provided the first opportunity for several years for the Congress and Assembly to be held together, and for the first time within the southern hemisphere, after careful deliberation the Executive Committee decided that the 1997 Assembly should also be in Rio. It recommended that the two events should be held during August, back-to-back (possibly with a slight overlap), with the Congress to take place first, subject to an additional cost to the Union for the Assembly, compared with recent venues, of no more than USD 50 000-100 000. The position paper on the IUPAC Congress (Minute 3.9/94) should be brought to the attention of the Brazilian Chemistry Committee, so that the new ideas might be introduced for the 1997 Congress. With regard to safety, it would be necessary to emphasize the need for all participants at these events to take out appropriate insurance cover.

5.3/94 40th General Assembly/37th Congress (1999)

It was agreed to defer consideration of the suggestion for the Congress to be held in even-years (Minute 3.9/94). The Secretary General would invite all NAOs to submit invitations to host the General Assembly and Congress in 1999, preferably back-to-back, but with the Congress first and even slightly overlapping the Assembly.

6/94 RESTRUCTURING IUPAC

The Executive Committee agreed that the emphasis should now be more on implementation rather than actual restructuring.

6.1/94 Allocation of Titular Members from Pool  
[Minute 4.5(i)/93, 63rd Bureau]

The Secretary General had invited (93.10.09) Officers of Divisions/Section, Commissions and Committees, and Bureau Members, to submit to the Secretariat by 94.03.15 proposals for projects to be undertaken through the Pool of twenty-four TMs. The Executive Committee critically assessed the proposals received. Their comments (Appendix C) would be sent by Prof. den Boef to the relevant Division Presidents. In addition, he would remind Division/Section Presidents and Bureau Members that late proposals could be submitted to the Secretariat by 94.08.31. Furthermore, Prof. Zamaraev suggested that each Member of the Executive Committee should propose a suitable project with coordinator. A good impression would not be created, if it had to be reported to Council in 1995, that not enough suitable projects could be generated to make full use of the available Pool of twenty-four TMs.

6.2/94 Unallocated Environmental and CAMP Monies 1994-5 (Minute 14.1/93, 64th Bureau; Minute 15.1/93, 119th Executive Committee)

In response to an invitation by the Treasurer (93.09.14), requests were considered by the Executive Committee for funding of urgent and important projects by Divisions/Section and Standing Committees, from unallocated environmental project monies (USD 4 010) and from the demise of the Coordinating Committee for Chemistry and Advanced Materials Programme (USD 20 000). The total amount requested was greater than the funds available. Priority was therefore given to those who needed monies for projects rather than for conferences or other purposes (Appendix D).

6.3/94 1994 Vice-Presidential Critical Assessment of IUPAC Projects and Programmes

Prof. Fischli indicated that the first draft of Part 2 of the Assessment had been circulated to Division/Section Presidents and Chairmen of relevant

Standing Committees on 94.04.06. The deadline of 94.05.01 agreed at Lisbon [Minute 4.5(ii)/93, 63rd Bureau] had therefore been met, and he looked forward to the response.

IUPAC's project management needed to be improved: updated concise information on running projects should be made easily accessible via the new current programmes database at the Secretariat, including retrieval of the original/amended project objective. There was still too much disparity between completed project initiation forms/progress reports under the new system of reporting.

Part 1 of the Assessment included an input from an ad hoc Vice-Presidential Advisory Board, together with short remarks on improving/focussing on core activities of the Union (scientific meetings, publications, chemistry and society, cooperation with other international organizations), and its finance, structure, functions, and visibility.

Prof. Fischli was concerned that the present IUPAC organizational chart did not capture all the excitement and advances in the biological side of chemistry. In order to remedy this and other deficiencies, he suggested changes to the scope of several Divisions/Section. Also, he stressed the importance of recruiting high quality people, who were willing powerfully to serve the Union, and to avoid "self-breeding".

There was an extended discussion on these matters. Prof. Bard advocated more use of interdivisional commissions to overcome difficulties inherent with the present structure. However, a mechanism was required to ensure that they worked effectively in practice (possibly with their own budgets outside the relevant Divisions). Prof. Brown felt that the changes did not go far enough in revitalizing some Divisions, but he agreed on the need to recruit key persons as officers of IUPAC bodies. The Secretary General foresaw strong opposition to changing the present system of identifying and electing officers, especially of Division/Section Presidents.

Prof. Fischli was invited to prepare a position paper on his suggested changes to the organizational chart, for consideration at Antwerp in his individual interviews with Division/Section Presidents and at the meetings of Division/Section Presidents and Bureau. A second position paper would deal with the importance of recruiting high quality people into the work of the Union.

#### 6.4/94 Possible New Directions

The President introduced some suggestions for possible new directions by IUPAC:

- (i) attracting the involvement/cooperation of more of the world chemistry elite (such as Nobel Prize winners), via a Distinguished Advisory Board, to provide input/advice on appropriate matters or to generate new ideas;
- (ii) utilizing former IUPAC Officers and prominent persons, possibly as a special category of Affiliate, to serve as representatives at IUPAC-sponsored symposia;
- (iii) improving the relationship with chemical industry, by introducing via COCI, advice to Divisions/Section and Committees of potential projects of interest to industry (such as any industrial concerns for elaboration of recommendations on nomenclature, symbols and terminology);

- (iv) establishing a network/panel of experts available to give rapid, balanced and independent chemical background comment on major strategic issues (acid rain, greenhouse effect, CFCs) for consideration of governmental action;
- (v) greater visibility for major new IUPAC initiatives, such as the Chemistry for Life activities this year, by publicity in national chemistry news journals and scientific news magazines as well as in CI;
- (vi) contributing to North-South interactions, for example by holding the IUPAC Congress and General Assembly back-to-back occasionally in the southern hemisphere (cf. Minute 5.2/94).

Prof. Zamaraev agreed to discuss these suggestions in more detail with Prof. Fischli, and to decide whether to prepare position papers for further consideration by the Executive Committee/Bureau and COCI.

## 7/94 IUPAC BODIES

### 7.1/94 Ratification of Memberships Approved by Correspondence

The appointments, which had been made through correspondence by the President since the 64th Bureau meeting (Appendix E), were ratified by the Executive Committee.

In the interests of flexibility for operation of Pool-TMs and the need for rapid execution of their projects, the Executive Committee ratified the decision of Secretary General den Boef (94.02.17), that endorsement by relevant NAOs of appointments for non-statutory bodies, such as the Working Party on Theoretical and Computational Chemistry (in effect a "project"), was unnecessary. However, NAO endorsement was still required for Pool-TMs in the case of statutory bodies (such as new Commissions).

Prof. J. A. Kerr occupied two TM-positions in the Physical Chemistry Division: Division Committee and Commission on Chemical Kinetics. A request from the Division President was approved by the Executive Committee for Prof. Kerr to resign from the Division Committee, and to use that TM-position released for appointment of Prof. W. Lorenz (FRG) exceptionally as a short-term TM (1994-1995) of the Commission on Electrochemistry. The Division's zero-sum of TMs was thereby unchanged.

### 7.2/94 Nominations for 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 F). In addition, the membership on COCI of Dr. K. Nukada (Japan) was extended exceptionally to the end of 1994, and Dr. C. Giordano was approved as its new Italian National Representative (1994-1997).

### 7.3/94 Reimbursement of Titular Members from Industry

Prof. Fischli pointed out that, in addition to COCI, several Titular Members of other IUPAC bodies from industry participated in the work without drawing any financial support from the Union. In view of the restricted funds available to IUPAC bodies, he suggested that this custom might be made mandatory by a change in Bylaw 4.307.

The Executive Committee sympathized with the suggestion, and was ready to encourage the custom, but doubted that it should be made mandatory. The "hidden" budget of the Union was recognized as being very significant. It was recognized that some problems existed, such as what to do when a person retired from industry, but continued to be involved in IUPAC activity. Prof. Fischli was invited to prepare a position paper for discussion by the Division/Section Presidents and Bureau at Antwerp.

7.4/94 Review of Monographs on Chemistry for the 21st Century -  
Editorial Advisory Board

The President reminded the meeting that the Standing Orders from the Executive Committee for the Board specified it should have a limited lifetime [Minute 7.5(ii)/92 and Appendix H, 117th Executive Committee - Dublin]. Unfortunately, the requirement to review the effectiveness of the Board at Lisbon had been overlooked. Accordingly, the Executive Committee agreed to continue the Board for two more years, and to undertake the review at the General Assembly in 1995 (Guildford).

Prof. Zamaraev was still in favour of identifying a person from industry to serve on the Board. Dr. B. W. Langley was now fully retired, and the Committee on Chemistry and Industry should recheck whether one of its Members might undertake this duty.

8/94 RELATIONS WITH OTHER ORGANIZATIONS

8.1.94 ICSU Matters

The Secretary General had already reported in writing to the Officers of the Union (93.10.18), following his participation in the 24th ICSU General Assembly (Santiago, Chile: 93.10.01-08). The existing Committee on Water Research (COWAR) was being replaced by a new body (SCOWAR), which would be engaged more with research than its predecessor and focus on fresh-water resources. The Scientific Committee on Oceanic Research had invited the IUPAC Commission on Environmental Analytical Chemistry to address the problem of trace analytical chemistry of sea water. The terms of reference of the existing Committee on Teaching of Science were too narrow, and a Committee on Capacity Building was to be established with the task of creation and maintenance of a scientific community in developing countries. The Committee on Science and Technology in Developing Countries had been merged with the International Biosciences Networks. The question arose whether networks could also be created in other sciences, and the developing countries part of IUPAC's affiliate programme might be considered as an important aspect of such a network. Prof. den Boef reiterated his earlier remarks that there should be a stronger influence for chemistry in the affairs of ICSU (Minute 3.6/94).

8.2/94 Statute for Associated Organizations

The Executive Committee noted the concern of the International Confederation for Thermal Analysis and Calorimetry, that IUPAC should adhere to the spirit of its Statute on Associated Organizations. In particular, when a worldwide international organization already existed in a given field (ICTAC), there was no point in affiliating a regional organization from the same field (Calorimetry Conference). An official proposal for change to Statute 11 was awaited. Meanwhile, the Executive Committee accepted as a guideline for new applicants for AO status, that their international scope of activities (with a no a-priori limitation to a part of the world) must be explicit either in

their title or statutes. In the case of apparent competition with another international, well established organization, an agreement signed by the Chairman or Secretary General of that organization (on behalf of the other Officers) must be provided.

8.3/94 Observer Country Status for Kazakhstan

An application for Observer Country status on behalf of the chemical community in Kazakhstan, accepted through correspondence by the Treasurer on behalf of the President, was ratified by the Executive Committee.

9/94 PUBLICATIONS

9.1/94 History of IUPAC  
(Minute 11.5/91, 115th Executive Committee - Pretoria)

The Executive Secretary reported that the complete text, covering the period from the start of IUPAC in 1919 until 1987, had been passed by Mr. R. W. Fennell to BSP on 94.03.29. Prof. T. S. West and Dr. Williams had commented on the chapters as they were drafted, and Profs. den Boef and Ward had undertaken a final perusal. It was planned to have an advance copy available in time for the Bureau meeting at Antwerp.

9.2/94 Solubility Data Series  
(Minute 9.1/93, 118th Executive Committee)

The Executive Secretary reported that an agreement had been signed (94.02.24) between the Union and its Commission on Solubility Data with Oxford University Press to publish SDS after Volume 54 (end of contract with Pergamon Press) as a journal.

9.3/94 IUPAC Handbook 1994-1995

- (i) The Executive Secretary reported that development of the computer network at the Secretariat, particularly the new IUPAC committee membership database, was now sufficiently advanced to generate the camera-ready material for printing the Handbook. NAOs had been given until the end of April to approve nominations of new members of IUPAC bodies, and it was anticipated that the material might be ready to go to BSP at the end of May. However, problems encountered in developing a current programmes database might preclude this particular material being available in time, in which case the Executive Committee agreed to issue it separately, so that the Handbook would not be delayed unduly.
- (ii) A letter was considered from Dr. Brenda P. Winnewisser (94.01.13), advocating that the full forename which they commonly used themselves in conjunction with their family name (and initials for any other forenames), should be included in future for both male and female members of IUPAC bodies. The Secretary General was sympathetic, but he recommended that implementation should be delayed until after the General Assembly at Guildford. To avoid complications in the earlier part of the 1996-1997 Handbook, the Deputy Executive Secretary had suggested that forenames should be given only in the alphabetical index to members of IUPAC bodies.

10/94 SPONSORSHIP OF SYMPOSIA

10.1/94 Sponsorship of Symposia

10.2/94 Official Representatives to Sponsored Symposia

The sponsorships of symposia (Appendix G)/appointments of official representatives of IUPAC to its sponsored symposia (Appendix H), approved through correspondence by the Secretary General on behalf of the President/made on behalf of the President since the 63rd Bureau meeting, were ratified by the Executive Committee.

11/94 REPORT ON SECRETARIAT

- (i) The Secretary General referred to the recent termination of employment tendered by Dr. M. H. Freemantle from his post as IUPAC Information Officer/Affiliate Affairs Secretary. Also, he drew attention to earlier discussions on reducing the cost of the Secretariat with a view to improving the balance in the IUPAC budget between science and administration (Minute 11/92, 117th Executive Committee - Dublin).

A temporary part-time contract had been signed with a freelance chemistry journalist located in Oxford, Mr. M. J. Ward, to prepare issues of CI until a successor to Dr. Freemantle was appointed. To overcome any shortfall in copy, Prof. den Boef would circularize Division/Section Presidents, Chairmen of relevant Standing Committees, and Bureau Members, appealing for their personal and urgent help in generating interesting articles for CI. The handling of other responsibilities of Dr. Freemantle would be discussed with the Executive Secretary, when the Secretary General visited the Secretariat shortly. Advertising the staff vacancy had been considered in some detail before the meeting, and it was reviewed by the Executive Committee.

- (ii) The Secretary General drew attention to his recent exchange of correspondence with Dr. S. R. Heller (Chairman, Committee on Chemical Databases), and what role CCDB should have with regard to purchase of computer hardware and software and of provision of software support services for the Secretariat. Such a role had not been envisaged by earlier Officers of the Union, but after due consideration the Executive Committee decided to enlarge the terms of reference of CCDB (*IUPAC Handbook 1991-1993*, page 45) as follows:

new (iii) - "To advise the Secretary General and Executive Secretary on hardware and software requirements for the Secretariat and on development of its computer network and databases."

with the present (iii) becoming (iv).

12/94 DATES AND PLACE OF NEXT MEETING

The preferred dates for the next meeting of the Executive Committee were agreed as 22nd-23rd April 1995. The Executive Secretary would evaluate an invitation from the Slovak National Committee for Chemistry to meet at Smolenice Castle.

An offer from the Slovak National Committee for Chemistry to help the Union in its administrative activities (printing and distributing brochures, circular letters, etc.) was judged to be impractical.

13/94 ANY OTHER BUSINESS

13.1/94 Presidency of IUPAC

The Secretary General suggested that, in line with the practice of some national chemical societies, the President of the Union might be appointed alternately from academia and from industry. The Executive Committee agreed to adopt the suggestion as a guideline, to be built into the biennial letter to NAOs, soliciting the nomination of candidates for IUPAC Officers and Bureau Members for election at the General Assembly.

13.2/94 Future Location of the Secretariat

Prof. Fischli enquired if it was now time to reconsider the possible transfer of the Secretariat from Oxford to the Fondation de la Maison de la Chimie in Paris [Minute 8.8(i)/92, 117th Executive Committee - Dublin]. Prof. den Boef agreed to discuss rental costs when he visited the Fondation on 94.04.19, and the Executive Secretary would contact ICSU about staff salaries in Paris. Unless there were significant financial and other advantages accruing, a move to Paris would not be worthwhile.

13.3/94 King Faisal International Prize in Science

The topic for the 1995 Prize was chemistry, and some candidates had been suggested, via a postal exchange within the Executive Committee, for nomination by IUPAC. However, no conclusion was reached on whether to proceed. Prof. Bard felt that invitations for IUPAC to make nominations for such prizes should be handled by a nominating board rather than the present ad hoc approach by the Union. Further discussion was deferred, so that the President might seek advice from prominent chemists at the Science for Life Forum (Brussels, Belgium: 94.05.26).

\* \* \*

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

*Zemosec*

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

29.04.1995



GUIDELINES FOR IUPAC REPRESENTATION AT MEETINGS OF  
INTERNATIONAL/REGIONAL ORGANIZATIONS

1. A list shall be drawn up annually by the President, in consultation with the Secretariat and approved by the Executive Committee, of organizations for which the Union will provide full funding for IUPAC representation. In addition, those organizations shall be identified, for which partial funding may be provided for such representation.
2. The list of official IUPAC Representatives on Other Organizations (*IUPAC Handbook 1991-1993*, pages 15-16) shall be reviewed by the outgoing President of the Union in consultation with the Secretary General.
3. In the case of special requests for IUPAC representation, funding (full or partial) may be granted by the President, subject to the restricted funds available and, if necessary, approval of the Treasurer.
4. Each IUPAC representative, when notified of the subject of the meeting, is required to check which other Division/Section/Commission/Committee's interest might be involved. The representative should then contact the relevant person to ensure that he/she is properly briefed on the subject before attending the meeting.
5. Each IUPAC representative to a meeting of another organization is required to submit a brief report on its activities, recommendations for any IUPAC activities - collaborative or otherwise - based on the meeting attended, and a recommendation about future IUPAC involvement with the organization. Failure to provide such a report will jeopardize future funding by IUPAC of representation to meetings of the organization.

ASSIGNMENT OF VOTES TO DELEGATIONS IN COUNCIL

At recent Council meetings (1991 and 1993), a proposal twice obtained a majority for a change of Statute 5.1 to assign 1-8 votes instead of 1-6, but not the required two-thirds number of assigned votes.

The present assignment of votes no longer properly reflects the original intention to have a fair relationship between the national subscription, resulting from its chemical turnover, and the influence in the voting. It was introduced in 1985 (Lyon), but has never been updated for inflation. This has resulted in ever increasing numbers of delegations in the categories with a higher number of votes.

Therefore, an adaptation is proposed to meet the present financial situation, as indicated below. For comparison the present assignment is given also.

<u>Assigned Votes</u>	<u>NAO Subscription (1000 USD)</u>	
	<u>Present</u>	<u>Proposal</u>
6	≥ 20	≥ 40
5	10.0-19.9	≥ 20
4	3.0-9.9	≥ 10
3	2.5-2.9	≥ 5
2	1.2-2.4	≥ 2
1	≤ 1.1	< 2

In order to give an impression of the consequences for NAOs, the 1994 subscriptions are given on the following page.

NATIONAL SUBSCRIPTIONS FOR 1994

NAO	CT 1989/90 Biennial Av (1 000 000 000 USD)	National Subscription (1 000 USD)
USA	287.9	93.7
Japan	172.5	66.2
FRG	96.0	44.4
-----		
France	59.7	32.2
UK	52.4	29.4
Russia	51.4	29.0
Italy	48.1	27.8
China/Beijing	36.7	23.1
Spain	30.7	20.5
-----		
Belgium	25.8	18.2
Netherlands	23.8	17.2
Canada	21.7	16.2
Korea Republic	18.8	14.7
India	15.9	13.1
China/Taipei	14.7	12.4
Switzerland	14.0	12.0
S. Africa	10.9	10.1
-----		
Australia	9.2	9.0
Sweden	7.9	8.1
Austria	7.4	7.8
Brazil	6.9	7.4
Portugal	5.0	6.0
Finland	4.8	5.8
Turkey	4.5	5.5
Denmark	4.4	5.5
Egypt	4.4	5.5
Ireland	4.2	5.3
-----		
Norway	3.3	4.5
Israel	3.3	4.5
Hungary	2.7	3.9
Czech Republic	2.5	3.7
Greece	2.1	3.3
Saudi Arabia	-	3.0
New Zealand	1.5	2.6
Chile	1.5	2.6
Slovak Republic	1.3	2.4
-----		
Argentina	0.4	1.1
Poland	0.3	0.9
Kuwait	0.2	0.7
Slovenia	-	0.5
Croatia	-	0.5
	-	-
<b>Total</b>	<u>1058.8</u>	<u>580.3</u>

ALLOCATIONS FROM POOL OF 24 TITULAR MEMBERS

- (i) Biophysical Characterization of Proteins (3 TMs) - There were no doubts about the scientific significance of the two parts of the project nor on the quality of the scientists to be involved. New initiatives were welcome, which led to involvement of IUPAC in the chemical aspects of biological systems, and which might soon result in creation of a Commission on Biophysical Chemistry and even further expansion (Minute 3.7/94). However, the project should be a straightforward task for a Commission on Biophysical Chemistry, and hence ineligible for funding through the Pool, according to the categories agreed for its projects.
- (ii) Sol-Gel and Polymer-derived Ceramics, Glasses and Ormocers (1 TM) - An interesting project, for which the objectives required some clarification (would a publication result, what was the time-scale, should other Divisions (such as Macromolecular)/Commissions be involved or might the project be coordinated by a new TM being nominated in the normal way at Guildford by the Commission on High Temperature and Solid State Chemistry?).
- (iii) Analytical Chemistry for the 21st Century (4 TMs) - A normal task expected to be undertaken by a Division (say a "Think Tank" of Division Committee and Commission Officers) rather than categories agreed for Pool projects.

Analytical Chemistry of Soils (3 TMs) - An interesting project, especially the final aim of preparing a book. Had other IUPAC bodies (Commissions on Environmental Analytical Chemistry and on Water Chemistry) been consulted, in order to avoid duplication or overlap of efforts? Could the project be completed within two years? Should the subject of decontamination of soils be part of the project?

Environmental Analytical Chemistry (4 TMs) - The quality and importance of the work of this Commission and its productivity were acknowledged. However, continuation of the Commission after 1995 should take place through the zero-sum TMs of the Division.

Analytical Aspects of Quality Control of Production Processes (3 TMs) - A very interesting project, but a more detailed description was required, showing clearly the objectives and content. Close contact with chemical industry would be indispensable, and the early involvement of COCI was desirable. If industry considered the project worthwhile, it might provide the funding from outside the Pool.

- (iv) Ethics in Modern Science (? TMs) - It was now hoped to proceed to a final version at Guildford (Minute 3.11/94).

UNALLOCATED ENVIRONMENTAL AND CAMP MONIES 1994-5

The following allocations were approved:

- (i) Steering Committee on Biophysical Chemistry to work on thermodynamics of enzyme-catalyzed reactions - USD 1 000
- (ii) Commission I.2 to undertake a round-robin study of transport properties of the environmentally friendly refrigerant R134a - USD 1 000
- (iii) Commission I.2 to continue work on fast ionic conductors - USD 2 000
- (iv) Commission I.6 to continue work on projects in surface chemistry of advanced materials including zeolite nomenclature - USD 2 000
- (v) Commission VI.4 to ensure scientific quality of International Workshop on Local Air Pollution in Rapidly Developing Countries (Beijing, China: 94.07 20-21) - USD 3 000
- (vi) Participation from enlarged pool of 24 TMs in 1995 General Assembly, so that approved projects can start immediately - USD 10 000

and, if still needed, underwriting (USD 1 500) of two important conferences on environmental protection involving Commission I.6.

MEMBERSHIPS APPROVED BY CORRESPONDENCE SINCE 64th BUREAU MEETINGI. STANDING COMMITTEESCHEMRAWN Committee

- |                           |                                |
|---------------------------|--------------------------------|
| Dr. P. M. Norling (USA)   | - Member (1994-1997)           |
| Prof. M. Dröscher (FRG)   | - Associate Member (1994-1997) |
| Prof. Fosong Wang (China) | - Associate Member (1994-1997) |

Committee on Chemical Databases

- |                             |   |
|-----------------------------|---|
| Dr. S. R. Heller (USA)      | - Chairmanship/Membership extended (1994-1995)    |
| Dr. R. Potenzzone (USA)     | - Secretary (1994-1996), to replace Dr. C. Jochum |
| Dr. C. Jochum (FRG)         | - Membership extended (1994-1995)                 |
| Dr. Y. Wolman (Israel)      | - Membership extended (1994-1997)                 |
| Dr. H. Kaindl (Switzerland) | - Associate Membership extended (1994-1997)       |
| Dr. H. V. Kehiaian (France) | - Associate Membership extended (1994-1997)       |
| Dr. W. G. Town (UK)         | - Associate Member (1994-1997)                    |

Committee on Chemistry and Industry

- |                               |                               |
|-------------------------------|-------------------------------|
| Dr. H. L. Senti (Switzerland) | - Member (1994-1997)          |
| Dr. G. J. Martens (Belgium)   | - Member extended (1989-1996) |

Committee on Teaching of Chemistry

- |                                    |                                   |
|------------------------------------|-----------------------------------|
| Prof. J. D. Bradley (South Africa) | - Member (1994-1997)              |
| Dr. Reiko Isuyama (Brazil)         | - Membership extended (1990-1997) |
| Prof. J. J. Lagowski (USA)         | - Member (1994-1997)              |

Committee on Publications

- |                        |                      |
|------------------------|----------------------|
| Dr. Wendy A. Warr (UK) | - Member (1994-1997) |
|------------------------|----------------------|

Monographs on Chemistry for 21st Century - Editorial Advisory Board

- |                            |                        |
|----------------------------|------------------------|
| Prof. M. A. El-Sayed (USA) | - Chairman (1994-1997) |
|----------------------------|------------------------|

IUBMB-IUPAC Joint Commission on Biochemical Nomenclature

- |                         |                                |
|-------------------------|--------------------------------|
| Dr. M. A. Chester (UK)  | - Member (1993-1996)           |
| Dr. H. B. F. Dixon (UK) | - Associate Member (1990-1995) |

## II. COMMISSIONS

### Physical Chemistry Division Committee

Prof. J. V. R. Heberlein (USA) - Member (1994-1995), by utilizing one unallocated zero-sum Titular Membership

### Commission on Physical Organic Chemistry

Dr. Marie-Françoise Ruasse (France) - Associate Member (1994-1997)

### Commission on Water Chemistry

Dr. Jutta Lintelmann (FRG) - Associate Member (1994-1997)  
Dr. R. J. Wright (USA) - Associate Member (1994-1997)

## III. POOL TITULAR MEMBERSHIPS

### Working Party on Theoretical and Computational Chemistry (Physical Chemistry Division)

Prof. J. E. Boggs (USA) - Titular Member (1994-1995)  
Dr. R. L. Hilderbrandt (USA) - Titular Member (1994-1995)  
Dr. M. H. Palmer (UK) - Titular Member (1994-1995)

**PURE AND APPLIED CHEMISTRY EDITORIAL  
ADVISORY BOARD (PAC-EAB)**  
(Established 1983)

**Members**

Prof. C. J. H. Schutte (1991-1994)  
Chairman  
Mr. P. D. Gujral  
Secretary

Dr. E. D. Becker (1987-1994)  
Committee on Publications  
Dr. A. D. McNaught (1994-1995)  
Interdivisional Committee on  
Nomenclature and Symbols  
Prof. K. Kuchitsu (1991-1995)  
Physical Chemistry Division  
Prof. G. J. Leigh (1991-1995)  
Inorganic Chemistry Division  
Prof. U. K. Pandit (1991-1995)  
Organic Chemistry Division  
Prof. A. D. Jenkins (1991-1995)  
Macromolecular Division  
Prof. A. Hulanicki (1991-1995)  
Analytical Chemistry Division  
Dr. J. Slanina (1991-1995)  
Applied Chemistry Division  
Prof. H. P. Lehmann (1991-1995)  
Clinical Chemistry Division  
Prof. C. G. Wermuth (1989-1995)  
Medicinal Chemistry Section

**MONOGRAPHS ON CHEMISTRY FOR 21st  
CENTURY - EDITORIAL ADVISORY BOARD**  
(Established 1990)

**Members**

Prof. M. A. El-Sayed (1994-1997)  
Chairman  
Mr. P. D. Gujral  
Secretary

Dr. A. Hayes (1993-1995)  
CHEMRAWN Committee  
??  
Committee on Chemistry and Industry  
Drs. J. Bouma (1994-1997)  
Committee on Teaching of Chemistry  
Prof. G. Somsen (1994-1997)  
Physical Chemistry Division  
Prof. K. L. Komarek (1991-1995)  
Inorganic Chemistry Division  
Prof. Irina P. Beletskaya (1990-1995)  
Organic Chemistry Division  
Prof. J. H. O'Donnell (1994-1995)  
Macromolecular Division  
Prof. M. Grasserbauer (1990-1995)  
Analytical Chemistry Division  
Prof. P. S. Steyn (1990-1995)  
Applied Chemistry Division  
Mr. T. D. Geary (1994-1995)  
Clinical Chemistry Division  
Prof. C. G. Wermuth (1990-1995)  
Medicinal Chemistry Section

**APPENDIX F**

**CHEMISTRY INTERNATIONAL EDITORIAL  
ADVISORY BOARD (CI-EAB)**  
(Established 1983)

**Members**

Prof. G. den Boef (1991-1995)  
Chairman  
(to be appointed)  
Secretary

Prof. E. Buncel (1994-1995)  
CHEMRAWN Committee  
Dr. S. R. Heller (1987-1995)  
Committee on Chemical Databases  
Mr. T. D. Culpin (1991-1995)  
Committee on Chemistry and Industry  
Dr. E. D. Becker (1989-1994)  
Committee on Publications  
Prof. Danièle Cros (1991-1995)  
Committee on Teaching of Chemistry  
Prof. I. M. Mills (1994-1997)  
Interdivisional Committee on  
Nomenclature and Symbols  
Prof. G. Somsen (1991-1995)  
Physical Chemistry Division  
Prof. K. L. Komarek (1991-1995)  
Inorganic Chemistry Division  
Prof. M. M. Mikołajczyk (1991-1995)  
Organic Chemistry Division  
Prof. A. D. Jenkins (1987-1995)  
Macromolecular Division  
Dr. M. Parkany (1994-1997)  
Analytical Chemistry Division  
Dr. T. R. Roberts (1994-1997)  
Applied Chemistry Division  
Prof. H. P. Lehmann (1991-1995)  
Clinical Chemistry Division  
Prof. C. G. Wermuth (1989-1995)  
Medicinal Chemistry Section



**INTERDIVISIONAL COMMITTEE ON  
NOMENCLATURE AND SYMBOLS (IDCNS)**  
(Established in its present form 1975)

**Members**

Prof. I. M. Mills (1991-1995)  
Chairman  
Dr. A. D. McNaught (1987-1995)  
Secretary

Prof. K. Kuchitsu (1989-1995)  
Physical Chemistry Division  
Prof. E. Fluck (1994-1997)  
Inorganic Chemistry Division  
Prof. H. A. Favre (1994-1997)  
Organic Chemistry Division  
Prof. P. Kratochvíl (1985-1995)  
Macromolecular Division  
Prof. A. Townshend (1991-1995)  
Analytical Chemistry Division  
Dr. T. R. Roberts (1994-1997)  
Applied Chemistry Division  
Mr. J. C. Rigg (1989-1997)  
Clinical Chemistry Division  
Prof. C. R. Ganellin (1991-1995)  
Medicinal Chemistry Section

**Associate Members**

Prof. T. Cvitas<sup>✓</sup> (1991-1995)  
Physical Chemistry Division  
Prof. R. Metselaar (1994-1997)  
Inorganic Chemistry Division  
Prof. M. M. Mikołajczyk (1991-1995)  
Organic Chemistry Division  
Dr. W. V. Metanowski (1994-1997)  
Macromolecular Division  
Prof. W. E. van der Linden (1994-1997)  
Analytical Chemistry Division  
Dr. R. Greenhalgh (1985-1995)  
Applied Chemistry Division  
Mr. M. Lauritzen (1989-1997)  
Clinical Chemistry Division  
(No appointment will be made)  
Medicinal Chemistry Section

**COMMITTEE ON TEACHING OF CHEMISTRY  
(CTC)**  
(Established 1963)

**Divisional/Sectional Members**

Prof. T. Cvitaš<sup>✓</sup> (1994-1997)  
Physical Chemistry Division  
Prof. L. Kihlberg (1989-1995)  
Inorganic Chemistry Division  
Prof. M. Ōki (1989-1995)  
Organic Chemistry Division  
Prof. S. Russo (1994-1997)  
Macromolecular Division  
Prof. Y. Marcus (1994-1997)  
Analytical Chemistry Division  
(No appointment will be made)  
Applied Chemistry Division  
Dr. H. G. J. Worth (1989-1997)  
Clinical Chemistry Division  
Prof. C. R. Ganellin (1989-1997)  
Medicinal Chemistry Section

SPONSORSHIPS OF SYMPOSIA BY IUPAC APPROVED BY CORRESPONDENCESINCE 63rd BUREAU MEETING

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

10-14 July 1994. 3rd International Conference on Inorganic Membranes.  
Worcester, MA, USA.

End July 1994. International Workshop on Local Air Pollution in Rapidly  
Developing Countries. Zhen De/Beijing, China.

8-12 August 1994. 13th International Conference on Chemical Education.  
Chemistry: The Key to the Future. San Juan, Puerto Rico.

22-26 August 1994. 6th International Symposium on Solubility Phenomena.  
Buenos Aires, Argentina.

29 August-1 September 1994. 2nd International Symposium on Macrocyclic  
Ligands for Design of New Materials. Buenos Aires, Argentina.

11-16 September 1994. 6th European Symposium on Thermal Analysis and  
Calorimetry. Grado, Italy.

19-22 September 1994. International Conference on Geotoxicology: Mutagens  
and Clastogens in the Environment. Oxford, UK.

3-6 October 1994. International Symposium on Molecular Mobility and Order  
in Polymer Systems. St. Petersburg, Russia.

14-16 November 1994. International Symposium on Functional and High  
Performance Polymers. Taipei, Taiwan, China.

9-15 July 1995. SAC 95: International Conference on Analytical Chemistry.  
Hull, UK.

10-14 July 1995. 36th Microsymposium on Macromolecules: High Swelling  
Gels. Prague, Czech Republic.

6-10 August 1995. 8th IUPAC Symposium on Organometallic Chemistry directed  
toward Organic Synthesis. Santa Barbara, CA, USA.

14-19 August 1995. 35th IUPAC Congress. Istanbul, Turkey.

28 August-2 September 1995. International Symposium on Industry-Education  
Initiatives in Chemistry. York, UK.

4-8 September 1995. 1st International Symposium on Ionic Polymerization.  
Istanbul, Turkey.

25-29 August 1996. 13th International Conference on Physical Organic  
Chemistry. Seoul, Korea.

September 1996. 20th IUPAC Symposium on Chemistry of Natural Products.  
Chicago, ILL, USA.

OFFICIAL REPRESENTATIVES TO IUPAC-SPONSORED SYMPOSIA APPROVED

BY CORRESPONDENCE SINCE 63rd BUREAU MEETING

4-9 July 1994. 8th International Congress of Pesticide Chemistry.  
Washington, DC, USA.

Dr. J. MIYAMOTO

17-22 July 1994. 15th IUPAC Symposium on Photochemistry. Prague, Czech  
Republic.

Dr. J. D. COYLE

17-22 July 1994. 13th International Conference on Chemical Thermodynamics.  
Clermont-Ferrand, France.

Dr. J. ROUQUÉROL

24-29 July 1994. 30th International Conference on Coordination Chemistry.  
Kyoto, Japan.

Prof. M. OKI

25-29 July 1994. 35th Microsymposium on Macromolecules. Prague, Czech  
Republic.

Prof. R. F. T. STEPTO

8-12 August 1994. 13th International Conference on Chemical Education. San  
Juan, Puerto Rico.

Drs. J. BOUMA

22-26 August 1994. 14th International Conference on Raman Spectroscopy.  
Hong Kong.

Prof. M. A. EL-SAYED

11-16 September 1994. 6th European Symposium on Thermal Analysis and  
Calorimetry. Grado Italy.

Prof. J. BARTHEL

18-22 September 1994. International Conference on Geotoxicology: Mutagens  
and Clastogens in the Environment. Oxford, UK.

Prof. NICOLA SENESI