

INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY

MINUTES OF 66th BUREAU MEETING

University of Surrey, Guildford, UK: 8th-9th August 1995

Present: Prof. K. I. Zamaraev (Chairman), Prof. A. J. Bard, Prof. M. T. Beck, Prof. G. den Boef, Prof. R. D. Brown, Prof. A. Chakravorty, Dr. D. F. Eaton, Prof. A. E. Fischli, Prof. E. J. Grzywa, Prof. J. Jortner, Prof. J. W. Lorimer, Prof. G. Modena, Prof. L. K. Sydnes, Prof. J. M. Ward, Prof. C. Zhang (Elected Members); Prof. K. Kuchitsu, Prof. K. L. Komarek, Prof. M. Oki, Prof. J. Economy, Prof. A. Hulanicki, Prof. P. S. Steyn, Prof. H. P. Lehmann, Prof. J. G. Topliss (Division/Section Presidents); Dr. A. Hayes (Chairman, CHEMRAWN Committee), Dr. R.-P. Martin (Chairman, Committee on Chemistry and Industry)

In Attendance: Prof. J. F. Bunnett (Chairman, Task Force on Scientific Aspects of Destruction of Chemical Warfare Agents - in part), Dr. D. H. M. Bowen (Chairman, Committee on Publications) - in part, Dr. S. R. Heller (Chairman, Committee on Chemical Databases) - in part, Dr. M. Williams (Executive Secretary), Dr. J. H. Williams (Deputy Executive Secretary)

1/95 INTRODUCTORY REMARKS AND FINALIZATION OF AGENDA

The following item was added to the agenda circulated by the Executive Secretary (95.07.17):

4.15 Council Item 25 - Any Other Business

and item 3.2.7 (Proposal for Commission on Quality Assurance) was withdrawn. The President indicated that some agenda items would be considered out of order to facilitate the presentations of persons from outside the Bureau.

2/95 MINUTES OF 65th MEETING OF BUREAU

2.1/95 Amendments and Approval of Minutes

The minutes of the meeting at Antwerp (circulated 94.12.09) were approved, subject to:

- (i) correcting the period as Chairman of the Committee on Chemistry and Industry for Dr. R.-P. Martin to "1994-1997" in Minute 6.11/94;
- (ii) changing "specific" to "explicit" in Minute 7.3/94 (line 8).

2.2/95 Matters Arising

There were no matters arising, which were not covered by items on the agenda.

3/95 MINUTES OF 121st MEETING OF EXECUTIVE COMMITTEE AND MATTERS ARISING

The minutes of the meeting at Reading (circulated 95.06.28) were recorded as having been received officially by the Bureau.

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

The President reported on developments since the Bureau meeting at Antwerp, especially his historical overview presented to the Executive Committee at

Reading. He drew attention to the Executive Committee recommendation for the Bureau to reconsider its decision at Antwerp and to the consensus reached in Guildford at a meeting of representatives of the NAOs of Germany, Russia, and USA, at which he had acted as a mediator. The proposals from that meeting would be submitted to the Commission on Nomenclature of Inorganic Chemistry (CNIC) for further consideration, according to the due IUPAC procedure for handling nomenclature issues in compliance with Bylaw 2.11. Dr. Eaton thanked Prof. Zamaraev for his personal initiative in convening the meeting of relevant NAOs, which showed the world chemistry community that the Union was seriously trying to solve this long drawn out problem.

Prof. Komarek said it should be recognized that the Bureau at Antwerp had reached, in good spirit, its decision on how to proceed. At Guildford the Inorganic Chemistry Division Committee had strongly supported the 1994 conclusions of CNIC. He mentioned the relevance of an earlier statement by the Union (Comptes Rendus/17th Conference, 1953, page 113), that priority of discovery of an element is only one factor to be considered in deciding which is the best name for international adoption.

The Bureau voted (1 abstention, none against) to reconsider its decision at Antwerp, by adopting as provisional the 1994 recommendations on names and symbols of transfermium elements published in PAC, in full accordance with Bylaw 2.11. The recommendations should be circulated to national/regional nomenclature centres in the normal way, with notices to be published in national/regional chemistry journals and magazines - and published officially in the January 1996 issue of CI - requesting submission of comments to CNIC by 96.05.31. In particular, NAOs should be invited to express their views on the matter. The comments arising should be discussed by CNIC, when it met in August/September 1996, with the aim of presenting recommendations, amended as decided by the Commission, for final ratification by the Council at the General Assembly in 1997.

3.2/95 Collaboration with UNESCO (Minute 3.3/95)

Vice-President Fischli reported briefly about the creation since Lisbon (1993) of an IUPAC-UNESCO Coordinating (Executive) Council for Chemistry (CCC-EC), and of his recent efforts to put together an International Chemistry Council (ICC) of well-known chemists, some being Nobel laureates and others being industrialists and from developing countries, with members of CCC as the core membership. The intention was to select and coordinate programmes of the type advocated and financed by UNESCO: a similar mechanism had already been established for physics. A start had been made for a few IUPAC programmes - CHEMRAWN IX (Seoul/Korea, 1996), Safety in Chemical Production and Environmental Training, Clinical Chemistry Training, Food Toxin Workshops - with financial support provided from UNESCO reserves.

The Deputy Executive Secretary pointed out that, in future, support would only be possible from the UNESCO budget through submissions as draft resolutions in conjunction with national laboratories/scientists and via regional UNESCO offices. The next input deadline was scheduled in two-years time, but resolutions requiring moral, not financial, support could be initiated before then. Two draft resolutions had been submitted by IUPAC just prior to the Guildford Assembly. Despite the heavy bureaucracy involved, significant sums of money were apparently available. The Vice-President and Secretary General encouraged Division/Section Presidents to start and initiate applications now.

3.3/95 Future Scientific Policy of the Union and Possible New Directions (Minutes 6.1 and 6.5/95)

The President pointed out that his views on possible new directions had been

submitted to the Bureau at Antwerp, raised again with the Executive Committee at Reading, mentioned in his report to the Council at Guildford on the State of the Union, and considered at the Division/Section Presidents meeting in Guildford (Minute 3.1/95). Also, Prof. Zamaraev referred to the special "brain-storming" session of the Executive Committee at the General Assembly (95.08.07), when discussions on the future scientific policy of the Union had been continued, but without a formal agenda. One important outcome was the decision to request, before the 1997 Council meeting, a justification for the continuation of each Commission. To that end a mid-term (four-six years) strategic plan for each Commission should be prepared, enabling the Division President to draw up a strategic plan for the Division, a first draft of which should be available for discussion by the Bureau in September 1996. The Union needed to undertake more projects with a broad global impact, and the Vice-President had been asked to draft a paper clarifying the meaning of "mission-oriented" with respect to IUPAC activities. Other Divisions should consider following the lead taken by the Physical Chemistry Division in introducing an external evaluation system, involving three or more reviewers from *J. Phys. Chem.* for each proposed new project. Further discussions had been scheduled by the IUPAC Officers in Paris on 95.12.11, and an extra day might be devoted solely to the matter in conjunction with the Bureau meeting in September 1996.

Dr. Eaton reiterated the concern of the US National Research Council/National Academy of Science (USA-NAO) to bring the Union to a new and more meaningful future role: withdrawal of the US national subscription was still a real possibility. Prof. Bard emphasized that the US authorities would need to be convinced about the most important achievements of the Union during the past two years.

Prof. Modena offered some thoughts on restructuring, by improving the line of command. The Bureau should not only establish new project proposals, but actually assign them to Divisions for execution: at present the Commissions themselves largely decided the projects on which they worked. There was also a need to become more market-oriented, by bearing in mind the expected outcome of each project. Ideas for new activities should be encouraged from "bright" scientists, but rapid execution was essential.

Dr. Hayes suggested that a management evaluation study of the Union might be undertaken by an external professional agency, and perhaps COCI could help. Prof. Fischli agreed to consider if and how to proceed. However, Prof. Modena preferred IUPAC to decide its own aims/objectives and to self evaluate its scientific activities on that basis. Prof. Komarek stressed that care should be exercised in implementing restructuring, bearing in mind that most of the project work had always been undertaken voluntarily and at minimum cost to IUPAC.

Prof. Topliss proposed that a questionnaire should be developed to solicit input from outside the Union - via its clients: university chemistry departments and chemical industry - of specific ideas of what activities might be undertaken by IUPAC. Prof. Lehmann mentioned that the International Federation of Clinical Chemistry had developed a strategic plan by using an advisor.

Prof. Brown said that it was very important to improve publicity about IUPAC activities by adopting a more journalistic approach, so that the whole chemical community and even the general public was better informed of the good work already going on. In the opinion of Prof. Lorimer, the main achievement of the Union had been to continue to bring together a large number of international chemists and to tackle problems in pure and applied chemistry.

In order quickly to satisfy the concern of the USA-NAO, Prof. Ward proposed that a small group of two-three persons might be appointed to identify the most important achievements of IUPAC. Prof. den Boef said that the Information Officer would be an essential contributor to such an initiative, which might even become an annual exercise for external dissemination in the view of Prof. Topliss. In his report to Council on the State of the Union, Prof. Zamaraev had referred to major achievements in IUPAC activity, and it was left for the President to act on Prof. Ward's proposal.

3.4/95 Progress on Pool Projects 1996-7 and Future Allocation Mechanism
(Minute 6.2/95)

The Executive Secretary presented an updated status report (as at 95.07.14) on the pool projects accepted by the Bureau at Antwerp. A deadline of 95.10.31 had been set for Prof. H. Nitsche to submit a detailed plan for Remediation of Heavy Element Contaminated Sites. Identification of TMs for Continuation of Commission on Isotope Specific Measurements as References and for Analytical and Physical Chemistry of Soils was delayed, pending the outcome of elections and restructuring changes at Guildford.

A paper on pool project procedures for 1998-9 by the Secretary General and Executive Secretary (95.06.20) had been precirculated. The Executive Committee recommended to proceed as in the present biennium. However, there should be a wider solicitation of project proposals than previously, with more emphasis placed on addressing the NAOs and Bureau (Elected Members) and perhaps the Company Associates (directly or in conjunction with COCI). Project submissions should be more detailed than in the past, especially in identifying in each case a coordinator and other potential expert participants.

The Bureau noted that, at the Division/Section Presidents meeting in Guildford (Minute 3.3/95), no adverse comments had been offered to the suggestions of Prof. den Boef and Dr. M. Williams for the future appointment of pool TMs. The requirement to obtain NAO approval for a pool TM in the case of a project undertaken directly by a statutory body (Minute 7.4/94, 120th Executive Committee - Oxford) would henceforth be discontinued. Between meetings of the Bureau (Executive Committee), approval of pool TM nominations would be authorized simply by the President of the Union after consultation with the Secretary General. Names of appointed pool TMs would be included in the biennial listing of pool projects in the IUPAC Handbook (with a minimum of cross references to IUPAC bodies), and their addresses, etc., would be included in the alphabetical index to members.

Regarding a note from Prof. Lehmann (95.01.16) on the process for submission of proposals and selection of pool projects and their TMs, it was left for the Secretary General to consider how these proposals might be incorporated by IUPAC.

Prof. Bard suggested that a small group might be set up outside the Union to consider a wider input in future of project proposals. Prof. Fischli agreed with the Executive Secretary that the International Chemistry Council (ICC - Minute 3.2/95) might also be a source of project proposals.

3.5/95 Proposals for Divisions of Chemistry and the Environment and of
Chemistry and Human Health [Minute 6.4(iii) and (iv)/95]

Prof. Fischli elaborated briefly on the precirculated reports of the meetings re creation of the two new Divisions and related changes, especially relocation of the Commission on Biotechnology as a direct responsibility of the Bureau for two (at most four) years. Council should be requested to allow existing statutory requirements - especially for election of

Memberships and Officers of IUPAC bodies - to be frozen for the next biennium in order to implement a philosophy of "lean management" and other aspects of restructuring. Some changes to Statutes and Bylaws would almost certainly be needed eventually (e.g., defining "Section" or eliminating its use in the Union), and preparation of Rules for the new Divisions would be necessary.

In fulfilment of Statute 10.2, the Bureau accepted the consensus view of the Division/Section Presidents (Minute 3.2/95, Guildford), that it should present a summary of the two reports to Council at Guildford, with proposed terms of reference for the two new Divisions, names for the Members/Officers of the Division and Section Committees and Commissions, but terms of reference only for entirely new Commissions. Dr. Martin said that COCI was in favour of creating the new Divisions, and it was ready to designate a COCI Member to liaise with each Division.

As an outcome of the Clinical Chemistry Division's 1994-5 pool project, Prof. Lehmann tabled a proposal for the creation of a new Commission on Components of Quality Systems in the Clinical Laboratory, including terms of reference and with provision for three TMs from the zero-sum total for the present Clinical Chemistry Division. The proposal was accepted by the Bureau for presentation to Council at Guildford.

Prof. Oki said Japanese chemical industry was anxious that reconstitution of the Inorganic Chemistry, Organic Chemistry, and Macromolecular Divisions to include "Materials" should not be forgotten [Minute 6.4(ii)/95, 121st Executive Committee]. Prof. Fischli indicated that this matter would be receiving his attention during the next biennium.

3.6/95 Proposal for Commission on Biophysical Chemistry
(Minute 3.8/95)

The Bureau agreed to recommend Council at Guildford to create a Commission on Biophysical Chemistry, as proposed to the Executive Committee with respect to terms of reference and activities, and with nominations for three TMs (drawn from the zero-sum TM-ship of the Physical Chemistry Division) and for six AMs.

3.7/95 Proposed Standing Committee on Chemical Weapons Destruction Technologies (Minute 6.9/95 - Prof. Bunnett in attendance)

The President gave a short introduction on the work of the existing Task Force within the Organic Chemistry Division, which had culminated in a recent report on Some Problems in Destruction of Chemical Munitions and Recommendations towards their Amelioration [*Pure Appl. Chem.* 67, 841 (1995) and *Chem. Intl.* 17, 52 (1995)]. Prof. Bunnett issued a statement on the current activities of the Task Force (95.08.06), including new project studies on chemical problems associated with old arsenical and with old "mustard" chemical weapons, and possible projects on evaluation of technologies for destruction of chemical weapons and of wet air oxidation for destruction of organic wastes dissolved or suspended in water.

The Secretary General reported that the Officers at Guildford had reached agreement with Prof. Bunnett, that the Task Force might be attached to the Bureau for the next two years as an ad hoc Committee, with some financial support from the Union. A written report should be provided to the Bureau in 1996, on any progress then achieved, otherwise to the Bureau at the 1997 General Assembly, when the situation should be reviewed. Prof. Oki said that this agreement was acceptable to the Organic Chemistry Division, and it was approved by the Bureau.

3.8/95 IUBMB-IUPAC Joint Commission on Biochemical Nomenclature
(Minute 7.5/95)

The Bureau noted the Executive Committee had resolved, that IUPAC was prepared to approve continuation of JCBN for three more years (i.e., until the end of 1998), but it was unable to increase its present level of financial support. A decision by the IUBMB Executive Committee on financial support by IUBMB beyond 1995 had been postponed until September 1995. The main problem was how to finance the secretarial work of the Commission.

3.9/95 Internal Audit of Accounts (Minute 4.2.1/95)

The Treasurer reported briefly on the work undertaken by the internal auditor, Dr. S. S. Brown, over the past two biennia. Noting the Finance Committee had reconfirmed its previous recommendation that further continuation of an internal audit after 1995 was unlikely to be warranted, the Bureau accepted a recommendation from the Executive Committee to discontinue the audit accordingly.

4/95 ITEMS FROM AGENDA OF 38th MEETING OF COUNCIL REQUIRING DISCUSSION, RESOLUTION, OR RECOMMENDATION BY BUREAU

4.1/95 Council Item 1 - Recommendation on Assignment of Votes to Delegations [Minute 5.1.2(ii)/95, 121st Executive Committee]

The Bureau noted that invitations for national delegations for Guildford had been issued on the basis of the assignment of votes approved at Lisbon. Those voting assignments would apply at the start of Council in Guildford, when the proposed new assignments using updated ranges of votes would be considered. The Bureau resolved to recommend that the new voting assignments should then apply for all further voting at Guildford.

4.2/95 Council Item 4 - Recommendations on Number of Elected Members of Bureau for 1996-7, for Filling Vacancies amongst Officers and in Bureau, and on Appointment of Tellers
[Minute 5.1.2(iii)/95, 121st Executive Committee]

(i) The Bureau accepted a proposal from the Officers of the Union, that Council should be recommended the total number of Elected members of the Bureau (Statute 7.2) during 1996-7 to be ten, and the number of vacancies was therefore four.

(ii) Because there was only a single candidate for each Officer vacancy, it was unnecessary for the Bureau to make recommendations to Council. It was agreed that the President should invite Council to fill the vacancies without any formal voting. Although the number of nominations for Elected Members of the Bureau exceeded the number of vacancies, the Bureau decided not make any recommendations for filling the vacancies (Bylaw 2.222).

(iii) The Bureau would recommend as Tellers during all voting in Council:

Prof. J. M. Ward (Bureau Member/Treasurer)/Prof. G. den Boef (Bureau Member/Secretary General)
Mr. S. S. Langer (Secretary, UK Delegation)
Dr. D. J. Raber (Secretary, USA Delegation)

4.3/95 Council Item 5 - Recommendation on Time of Elections

In accordance with recent practice, the Bureau agreed to recommend to Council that the Election of Officers of the Union and of Elected Members of the Bureau should take place at 10.00 hours on Friday, 11th August 1995.

4.4/95 Council Item 6 - Recommendation on Appointment of Auditors for 1995-6 (Minute 4.2.3/95, 121st Executive Committee)

The Bureau agreed to recommend to Council that Neutra Treuhand AG should be reappointed as auditors for 1995-6.

4.5/95 Council Item 12 - Recommendation on Continuation of Affiliate Membership Programme and on UK-NAO Proposal
(Minute 3.5/95, 121st Executive Committee)

[Bureau agenda item 5.6, Matters Arising from Meeting of Committee on Affiliate Membership (Guildford, 95.08.08), was considered in conjunction with item 4.5.]

The Treasurer reminded the meeting of the conclusions in the AMP Review Group report, and he showed an overhead transparency which indicated the number of CI copies distributed to Affiliates as being 4 979 (as at 95.07.31). The total budgeted (but not used) subsidy of AMP by the Union at the end of 1994 was USD 74 000. In view of the assessment by the new Affiliate Affairs Secretary, Dr. J. H. Williams, that it was impossible to reverse the decline in AMP membership which had taken place over the past seven years in the next biennium and approach a break-even financial status, did the Bureau wish to proceed as agreed at Antwerp (Minute 3.5/94, 65th Bureau - Antwerp) or to change its recommendation to Council at Guildford?

The Secretary General reported on the deliberations of CAM at Guildford, especially the unanimous opinion that it would be impossible to increase the total number of Affiliates to 8 000 within the next two years and, in view of the financial subsidies required for continuation, AMP should be discontinued. However, concern had been expressed that IUPAC should try to maintain contact with chemists in developing countries by setting up a network, acceptable for potential funding by UNESCO and providing free copies of CI to chemists in developing countries. Costs might be kept down by reducing from six to four issues of CI per year, and printing say 2 000 copies of each issue (half destined for IUPAC internal use and half for networking to chemists in developing countries).

Prof. Fischli agreed that it was unlikely the total Affiliates could be increased to 8 000 by 1997, and he supported the suggestion for networking to developing countries. Also, he favoured the inclusion of an "old guard" element, as advocated by President Zamaraev in his suggested new directions for the Union.

Prof. Bard was concerned at the implications for the Secretariat overheads and staff, if AMP was discontinued. Would any money be saved in practice, or would the overheads and staff be transferred to other increasing IUPAC activities? The Secretary General said that, in conjunction with the Treasurer and Vice-President, it was planned to present a recommendation on future Secretariat staffing requirements at an Officers meeting in December 1995 (Paris), in which the possible discontinuation of AMP could be borne in mind. If AMP was discontinued, Prof. Komarek felt that Dr. J. H. Williams should have significantly more time to devote to publicity of the Union, which had been identified several times at Guildford as a priority requirement.

In the opinion of Prof. Topliss, many Affiliates would remain even if only a single (or no!) issue of CI per year was provided, and accordingly AMP should be retained.

A vote was taken on a modified Bureau recommendation to Council at Guildford, that AMP should be discontinued at the end of 1995, but with provision for networking to chemists in developing countries and for maintaining contact with the "old guard", and carried (17 in favour, 6 against, 2 abstentions). The Treasurer would advise Council accordingly.

4.6/95 Council Item 13 - Recommendation re Preferred Wording Change to Statute 11 by Dutch-NAO and Revised Division/Section Rules
(Minute 3.4/95, 121st Executive Committee)

- (i) A letter was considered from the Dutch-NAO (95.06.26) in respect of the recommended change to Statute 11 for Associated Organizations, circulated with the Council agenda to NAOs (95.04.10). It expressed the opinion that the decision for IUPAC to associate with an international organization was, according to the Statutes, an autonomous decision of the Council, which should not and could not be made subject to a prior agreement or approval by an existing AO. There was no preference within the Bureau to support the proposed Dutch amendment.
- (ii) The Bureau supported the proposal from the Executive Committee to ask Council, directly after the voting on the changes in Statutes and Bylaws, for permission that the Union Officers on behalf of Council might accept revised Division/Section Rules soon after Guildford, but only in so far as the revisions were an immediate consequence of the changes in S&B.

4.7/95 Council Item 14 - Recommendation for Continuation/Dissolution of Existing IUPAC Bodies and for New and Reconstituted Bodies

Subject to earlier decisions in respect of modifications of Divisions and Section (Minute 3.5/95) and for a new Commission on Biophysical Chemistry (Minute 3.6/95), the Bureau agreed to recommend to Council that all existing Commissions of the Union should be allowed to continue for the next two years (Bylaw 4.302).

Changes in title for Commission II.2 to "High Temperature Materials and Solid State Chemistry" and for Commission II.4 to "Isotope Specific Measurements as Traceable References", proposed by Prof. Komarek, would be recommended by the Bureau to Council at Guildford.

4.8/95 Council Item 15 - Recommendation re Endorsement of Manila Declaration and Melaka Accord
[Minute 5.1.2(i)/95, 121st Executive Committee]

Prof. Fischli reported that, after the discussion paper from the Australian-NAO had been circulated to the Bureau (95.06.28), he had invited Prof. Topliss and Dr. Martin to discuss it thoroughly with their colleagues in the Medicinal Chemistry Section and in COCI and to advise the Bureau on their conclusions.

Prof. Topliss had duly contacted his Working Party on Guidelines for Natural Products, whose Chairman (Prof. L. A. Mitscher) confirmed that the general principles of concern expressed in the paper were acceptable. However, he had pointed out that it contained matters of potential legal implications, and the complete paper could not therefore be recommended for endorsement by

IUPAC. Dr. Martin indicated that COCI was ready to contact chemical industry through its Members, in order to solicit views on the paper. Furthermore, the Medicinal Chemistry Section and COCI were agreeable to develop a draft IUPAC statement on the matter over the next few months. The Bureau requested that the draft, if possible, should be available for consideration by the Executive Committee in April 1996, but it should certainly be tabled when the Bureau met in September 1996. Prof Brown cautioned that it was important to ensure input from resources-rich and resources-poor countries by the Union in respect of its statement.

4.9/95 Council Item 16 - Ratification of Dates and Place for 39th General Assembly and of Dates and Place/Scope of 36th Congress
(Minutes 5.2 and 5.3/95, 121st Executive Committee)

Faced with escalating air travel costs to Rio de Janeiro and additional expense to IUPAC of about USD 250 000 instead of the USD 100 000, considered to be the maximum which could be defended in Council (above the previously planned GA location of Graz), the President said that the Executive Committee had decided to withdraw its acceptance of the offer of the Brazilian Chemistry Committee (BCC) to host the Assembly in 1997. Furthermore, a deadline of 95.06.30 had been set for BCC to reach a unanimous commitment from its four constituent associations to organize the Congress, but this had not been forthcoming.

Switzerland was already a contender for the Assembly and Congress in 1999, and Schweizerisches Komitee für Chemie had confirmed at short notice that it was willing to host these events at Geneva in 1997 (Assembly during 23rd-30th August and Congress during 18th-22nd August). The Bureau agreed to recommend Council to accept the revised invitation from Switzerland. Since the Swiss organizing committees could not meet until after Council decided how to proceed, it would be impossible for the scope of the Congress to be approved at Guildford (Statute 13.1).

4.10/95 Council Item 17 - Recommended Budget Proposal and National Subscriptions for 1996-7/Minimum National Subscription
(Minutes 4.2.6 and 4.2.8/95, 121st Executive Committee)

The Treasurer referred briefly to his precirculated biennial report to Council (Item 7), and drew attention to the new principle of splitting allocations to IUPAC bodies (Standing Committees and Divisions/Section) over the two years of a budget biennium. His latest forecast was for a surplus of USD 49 000 for the financial biennium 1994-5, so that the finances of the Union were now under better control. Provided that 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.

Regarding his balanced budget proposal for 1996-7, Prof. Ward had been able to increase the biennial allocation to IUPAC bodies by USD 30 000, based on the impact of decreased Secretariat costs and a 3% increase each year in national subscriptions (in line with inflation in OECD countries). Dr. Eaton indicated that it would be difficult for USA to keep up with the proposed subscription increases from governmental sources. Prof. Modena expressed similar concern in the case of Italy. Nevertheless, the Bureau agreed to recommend Council to approve the proposed 1996-7 budgets and national subscriptions, and that a minimum national subscription of USD 1 000 should be introduced for 1996 onwards.

- 4.11/95 Council Item 19 - Recommendation on Place and Dates for 40th General Assembly and 37th Congress
(Minute 5.3/95, 121st Executive Committee)

Noting the evaluation made by the Executive Committee of the invitation from Deutscher Zentralausschuss für Chemie to host the events at Berlin in 1999, the Bureau agreed to recommend Council to accept the invitation (Assembly during 7th-14th August and Congress during 15th-19th August).

- 4.12/95 Council Item 22 - Recommendation on Language for Official Records during 1996-9

On the proposal of the President, the Bureau agreed to recommend to Council, that English should be the one language in which the official records of meetings of the Council, Bureau, and Executive Committee should be kept and published during 1996-9 (Statute 5.405).

- 4.13/95 Council Item 23 - Recommendation re Change of Status for Names and Symbols of Transfermium Elements

In view of the Bureau reconsideration (Minute 3.1/95) to adopt as provisional the 1994 recommendations on names and symbols of transfermium elements published in PAC, Council should be advised that it was no longer necessary to ratify the recommendations as definitive.

- 4.14/95 Council Item 24 - Important Matters Discussed by Bureau at 38th General Assembly Not Covered By Items on Council Agenda

The Secretary General advised that there were no such matters so far considered by the Bureau. A final decision should be taken at the end of the meeting, if anything of importance needed mention by him to Council.

- 4.15/95 Council Item 25 - Any Other Business

Noting that 2001 would be the centenary of formation of the Federation of Australia, the Bureau agreed that the Australian Delegation might issue an advance invitation to host the 41st General Assembly and 38th Congress in Brisbane at that time. A formal invitation should be submitted in 1996, when invitations would be solicited officially from NAOs to host these events.

5/95 IUPAC BODIES

5.1/95 Financial Matters

The Treasurer reported that, at the meeting in Guildford of Division/Section Presidents, the matter had again been raised of the large discrepancies between allocations per TM for the various Divisions/Section. In view of the consensus that the allocations should be made more uniform (Minute 3.5/95), he had agreed to draft a paper for consideration at the next meeting of the Executive Committee.

5.2/95 Matters Arising from Guildford Meeting of Division/Section Presidents

Prof. Komarek reported that the main matters discussed were the Future Scientific Policy of the Union and the Proposals for Divisions of Chemistry and the Environment and of Chemistry and Human Health. Recommendations on these and other matters had already been presented to the Bureau. He mentioned that Prof. Economy had agreed to succeed him as Chairman of the Division/Section Presidents Group in 1996.

5.3/95

Matters Arising from Guildford Meeting of Committee on Publications (Dr. Bowen in attendance)

Using overhead projection transparencies, Dr. Bowen summarized highlights and concerns surfacing from the PC meeting:

- (i) "Committee on Printed and Electronic Publications" was accepted by the Bureau as the name for the amalgamated body to be recommended to Council in place of the existing Committees on Publications and on Chemical Databases [terms of reference already available (Minute 8.2/95, 121st Executive Committee) and membership of amalgamated body clarified (95.07.25)].
- (ii) PC was ready to play a part in publicizing IUPAC activities whenever appropriate. Accordingly, it was appointing a Working Party to help establish an IUPAC home page on the Internet/World Wide Web by the end of 1995. The WP was also being charged with drafting a set of guidelines, which would assist IUPAC bodies to understand how best to have information arising from their activities available on the WWW, and to avoid problems with uncoordinated loading of IUPAC information. Concern had been expressed about misunderstanding of which IUPAC recommendations were official (published in PAC) and which were not (i.e., provisional). Prof. Lehmann said that IUPAC recommendations as a database from the Clinical Chemistry Division had only been placed on a WWW site as an experiment, and they were now withdrawn.

Prof. Bard proposed that all material intended for the *IUPAC Handbook 1996-7* should be made available only on the WWW. However, although PC agreed that most of this material should be so handled, it would not be a substitute immediately for a printed edition. The Executive Secretary pointed out some Officers of the Union and of IUPAC bodies would not have access to the WWW during the next biennium.

- (iii) The Bureau accepted a recommendation from PC that the library subscription rate for PAC in 1996 should be increased from USD 895 to 950 (due to recent large rises in the cost of paper), and from USD 96 to 105 for CI.
- (iv) Compared with most research journals, the circulation of PAC was holding up exceptionally well. In the opinion of PC, Divisions/Section and symposia editors must exercise peer review of material prior to publication in PAC, and the provision of all material would be requested in electronic format.

Prof. Lorimer strongly supported refereeing of symposia papers prior to publication in PAC, and evidence should be provided that this had been carried for each paper. Also, he advocated a move towards uniformity of format (especially typefaces) for all camera ready copy material to appear in the journal.

Prof. Fischli hoped that publicity for the contents of PAC on the WWW might overcome the criticism of "burying material in PAC".

- (v) In view of poor book sales for some specialized IUPAC data compilations, PC suggested that it was only worthwhile in future to issue such data electronically.
- (vi) Concern had been expressed about poor dissemination by means of PAC of environmental reports from IUPAC and about possibilities to publish them in specialist environmental journals (Minute 8.1/95,

121st Executive Committee). PC welcomed further distribution through republication (and translation) without formal IUPAC permission, provided that the full PAC reference was cited in the republished (translated) version. Simultaneous publication was difficult because of this requirement.

- (vii) PC had reviewed the effectiveness of the Monographs on Chemistry for the 21st Century - Editorial Advisory Board (Minute 7.4/94, 120th Executive Committee - Oxford), and recommended its continuation during 1996-7. The series should be completed by 1999, with all monographs to be commissioned by the end of 1997, when the EAB would be discontinued.

5.4/95 Matters Arising from Guildford Meeting of CHEMRAWN Committee

Dr. Hayes was concerned at the state of development of the scientific programme and other arrangements (especially involvement of persons from various policy-making spheres) for CHEMRAWN IX: World Conference on Sustainable Production, Use, Disposal and Recycling of Materials and the Role of Advance Materials in Sustainable Development (Seoul, 96.09.01-06). A CHEMRAWN advisory subcommittee would carefully evaluate the situation with the Korean organizers (Washington, DC, late October 1995) and, if there was no significant improvement, the Conference would have to be postponed.

A pilot programme of atmospheric monitoring over the Amazon region of Brazil was under active preparation, as a follow-up action after the successful CHEMRAWN VII Conference (Baltimore, 1991). An extension of this programme to Australia was anticipated soon.

Three proposals under consideration for the future were:

- (i) cooperation with the International Organization for Chemical Sciences in Development and with help from UNESCO for a regional Conference in Latin America to establish a quality assurance network for environmental and analytical questions [evaluate the existing (or lacking) environmental legislation, level of training, official methods of analysis, laboratory management, etc.]
- (ii) a Conference on remediation of polluted and contaminated soils, possibly in Eastern Germany (1998). There was also the related problem of dumping of chemical wastes, which overlapped to some extent with that of the destruction of chemical weapons (Minute 3.7/95).

The Executive Secretary drew attention to the IUPAC pool project on remediation of heavy element contaminated sites (Minute 3.4/95), on which there was little progress as yet: perhaps the two initiatives might be combined.

- (iii) a Conference entitled "Chemical Education: A World Need", with the aim of devising a new system of education in chemistry, one that developed a capacity to be responsive to future world economic and technological needs. The Committee on Teaching of Chemistry favoured the idea, but it would need to be oriented towards developing-country problems to attract the attention of UNESCO. An important aspect was a requirement of basic chemistry for responsible citizens - scientific literacy - to overcome disaffection and misinformation by public media.

5.5/95 Matters Arising from Guildford Meeting of Committee on Chemistry and Industry

Dr. Martin said that COCI had decided to follow up the 1994 Company Associate recruitment campaign (Minute 12.2/94, 65th Bureau - Antwerp), by sending membership requests to senior chemists within each company. However, it was important to formulate more projects of interest to the chemical industry, because the role of IUPAC in the chemical standardization field was insufficient to encourage new CAS. The 3rd Workshop on Safety in Chemical Production was being organized jointly with the American Chemical Society to take place in New York during April 1996. With regard to the request for COCI to propose new projects of broad international significance, necessitating the involvement of IUPAC, it had decided to initiate an IUPAC activity on the question of whether chlorine and chlorine-based products should be banned. An authoritative scientific report would be prepared, which might become a special issue of PAC with, as a conclusion, a strong statement from IUPAC. COCI had agreed to prepare a monograph on *Future Trends in Chemical Industry* for the series *Chemistry for the 21st Century*, with contributions from specialists and research/development managers. Also, COCI was considering how best IUPAC might express its intention to adhere to the UNEP Code of Ethics on International Trade in Chemicals [Minute 7.2(ii)/95, 121st Executive Committee].

5.6/95 Matters Arising from Guildford Meeting of Committee on Chemical Databases (Dr. Heller in attendance)

A report on the activities of CCDB since Lisbon had been precirculated. Dr. Heller said that CCDB now recommended the provision of funds to establish and maintain an IUPAC presence on the Internet by having a World Wide Web site (IUPAC home page). There was a slow move towards establishing, at a cost, passwords for accessing some material. This was important to protect the income to the Union from traditional hardcopy publications via Blackwell Science. Dr. Heller mentioned that response times would become a significant factor in future use of the Internet: mirror sites in USA and Japan would be needed in addition to Europe.

5.7/95 Matters Arising from Guildford Meeting of Interdivisional Committee on Nomenclature and Symbols

Due to illness, Prof. I. M. Mills (Chairman, IDCNS) was unable to be present. (A written report was provided later, which drew attention also to meetings of the Comité Consultatif des Unités and Comité Consultatif pour la Quantité de Matière/Comité Internationale des Poids et Mesures, which he had attended on behalf of IUPAC.)

5.8/95 Matters Arising from Guildford Meeting on Environmental Chemistry Matters

The Secretary General emphasized that environmental activities would still be allowed throughout the Union, with the President of the new Division of Chemistry and the Environment (DCE) to act as the coordinator. However, when appropriate and significant in their evolution, such activities should be encouraged to move to DCE (e.g., Subcommittee on Gas Kinetic Data Evaluation for Atmospheric Chemistry from Commission I.4; Subcommittee on Environmental Protection: Colloid, Surface and Catalytic Aspects from Commission I.6). Prof. den Boef said that the coordinating role of the DCE President was clearly stated in a draft job description for that office (see Appendix B to Minutes of Division/Section Presidents - Guildford), but it was not yet known if an annual meeting of interested parties would constitute an effective cross-communication mechanism.

5.9/95

Report of Committee on Teaching of Chemistry

A precirculated report on the activities of CTC (95.06.15) from its Chairman, Prof. K. V. Sané, was taken as read. It was noted that an account of the work of CTC since its creation in 1963 had been published in the *International Newsletter on Chemical Education* (June 1995), in which Prof. Sané had played a considerable part over the past several years. His term as Chairman would be completed at the end of 1995, and a recommendation was expected shortly for a successor.

5.10/95

Ratification of Memberships Approved by Correspondence

The appointments, which had been made through correspondence by the President since the 121st Executive Committee meeting (Appendix A), were ratified by the Bureau.

6/95

SPONSORSHIP OF SYMPOSIA

The sponsorships of symposia (Appendix B), approved through correspondence by the Secretary General on behalf of the President since the 121st Executive Committee meeting, were ratified by the Bureau. The President said that many of the sponsored meetings were on well established themes, and he urged the Divisions to draw attention to more new "hot spot" subjects.

7/95

FUTURE LOCATION OF IUPAC SECRETARIAT

(Minute 10/95, 121st Executive Committee)

The Secretary General referred to the offer from Gesellschaft Deutscher Chemiker to provide the necessary office space for the Secretariat at zero rental level in Frankfurt ([Minute 10(ii)/94, 65th Bureau - Antwerp]). The Executive Committee had, therefore, decided to make this known to all other NAOs, in order to give them the opportunity to express their opinion by 95.07.15, if they so wished. This had led to a renewed offer from Fondation de la Maison de la Chimie at Paris, but now at zero rental [Minute 10(i)/94, 65th Bureau - Antwerp]. The two offers and other comments from NAOs had been considered by the Union Officers at Guildford (95.08.04), and the matter was now open for input from the Bureau. However, in Prof. den Boef's opinion, eventually a decision should be taken by the Officers and Executive Committee, without involvement of the Bureau (or Council). If it was decided to move from Oxford, then the projected target date was 98.01.01. A position paper was to be developed for a meeting of Union Officers at Paris (95.12.11): the Secretary General would provide details of the agreed future staffing structure/job descriptions (including implications arising from discontinuation of AMP, if this was approved by Council at Guildford: Minute 4.5/95), the Treasurer would provide information on salary implications for Secretariat relocation in Frankfurt and Paris, and the Vice-President would add his personal view.

Prof. Fischli was attracted to the possibility of "internationalizing" the Secretariat by moving its location to another country, even to Japan or USA, eventually every ten years. This would stimulate a regular critical assessment of the work of the Secretariat. Nevertheless, the good work of the current staff at Oxford under the leadership of the Executive Secretary was well recognized. If the Secretariat remained in Oxford, "bench marking" with similar offices, say at Oxford University and other locations in Europe, Japan, and USA, should be undertaken. Prof. Modena was supportive, in principle, of the views expressed by Prof. Fischli.

The Treasurer referred to his efforts to obtain information for staff

salaries at various possible Secretariat locations, bearing in mind that staff salaries presently constituted over 80% of the total cost for Oxford. It was necessary to develop staff profile descriptions in order to confirm salary requirements elsewhere. However, the interim conclusion was that the requirements would be at least 20% more than for Oxford.

In the opinion of Prof. Komarek, it was unrealistic to think of moving the Secretariat even every ten years: the disruption would almost certainly outweigh any financial savings. Prof. Sydnes was also worried about the dynamics of relocating every ten years: after eight years there was a danger of inertia setting in, and an induction period of one year would be needed to make a move effective. Prof. Grzywa agreed with these views. Prof. Lorimer said that competence in the official language of the Union was an essential requirement for new staff, and Prof. Economy stressed other important factors as being computer competence and younger staff.

8/95 ANY OTHER BUSINESS

8.1/95 Important Items Discussed by Bureau at 38th General Assembly Not Covered by Items on Council Agenda

The Bureau agreed with the Secretary General, that there were no such matters (Minute 4.14/95).

* * *

CHAIRMAN:

Albert Lidel

DATE:

Sept. 8th 1996

MEMBERSHIPS APPROVED BY CORRESPONDENCE SINCE
121st EXECUTIVE COMMITTEE MEETING

I. STANDING COMMITTEES

Committee on Chemistry and Industry (COCI)

Mr. G. Qu (Chinese Chemical Society,
Beijing) - Membership extended (1996-1999)
Mr. W. Lubiewa-Wielezyski (Poland) - Member (1995-1998)

Finance Committee

Dr. M. M. G. Senden (Netherlands) - Member (1996-1999)

II. POOL TITULAR MEMBERSHIPS

Working Party on Oil Spill Clean-up and Remediation

Mr. D. Bedborough (UK) - Titular Member (1996-1997)
Dr. F. R. Engelhardt (USA) - Titular Member (1996-1997)
Mr. K. Gaaseidnes (Norway) - Titular Member (1996-1997)

Working Party on Alternative Scenarios for Energy Production in the Future

Dr. A. V. Bridgewater (UK) - Titular Member (1996-1997)
Prof. D. O. Hall (UK) - Titular Member (1996-1997)
Prof. V. N. Parmon (Russia) - Titular Member (1996-1997)
Prof. H. Tributsch (FRG) - Titular Member (1996-1997)

Thermodynamic and Chemical Database for Hazardous Waste Processing

Prof. M. J. Kushner (USA) - Titular Member (1996-1997)

Sol-Gel and Polymer-Derived Ceramics, Glasses, and Ormocers

Prof. A. B Brennan (USA) - Titular Member (1996-1997)

Environmental Safety Assessment of Agrochemicals

Dr. R. D. Jones (USA) - Titular Member (1996-1997)

APPENDIX B

SPONSORSHIPS OF SYMPOSIA BY IUPAC APPROVED BY CORRESPONDENCE SINCE 121st EXECUTIVE COMMITTEE MEETING

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

16-19 April 1996. International Conference on Chemical Physics on the Border of the 21st Century. Moscow, Russia.

21-24 May 1996. 2nd International Symposium on Molecular Order and Mobility in Polymer Systems. St. Petersburg, Russia.

17-20 June 1996. International Symposium on Theoretical and Experimental Aspects of Protein Folding. San Luis City, Argentina.

24-28 June 1996. 11th Bratislava Conference on Polymers: Thermal and Photo-Induced Oxidation of Polymers and Its Inhibition in the Upcoming 21st Century. High Tatras, Slovak Republic.

14-17 August 1996. 2nd International Conference on Excitonic Processes in Condensed Matter. Bad Schandau, Federal Republic of Germany.

23-30 August 1996. 10th International Biotechnology Symposium. Sydney, Australia.

14-17 July 1997. 38th Microsymposium on Macromolecules: Recycling of Polymers. Prague, Czech Republic.

21-24 July 1997. 17th Discussion Conference on Macromolecules: Surface and Interfacial Phenomena in Macromolecular Systems. Prague, Czech Republic.

27 July-1 August 1997. 8th International Conference on Bioinorganic Chemistry. Yokohama, Japan.