

MINUTES OF 117th EXECUTIVE COMMITTEE MEETING

Trinity College, Dublin, Ireland: 23rd-24th May 1992

Present: Prof. A. J. Bard (Chairman), Prof. G. den Boef, Dr. Mary L. Good, Prof. S. Itô, Prof. Y. P. Jeannin, Prof. H. A. Staab - in part, Prof. J. M. Ward, Prof. K. I. Zamaraev

In Attendance: Dr. M. Williams (Executive Secretary)

1/92 INTRODUCTORY REMARKS AND FINALIZATION OF AGENDA

The following items were added to the agenda circulated by the Executive Secretary (92.05.11):

- 6.6 Current Programmes
- 6.7 Proposal for LLTC on Recycling of Polymers
- 8.10 IUPAC Representation at Meetings of International/Regional Organizations

Anticipated information was not available for items 4.6 (Committee on Teaching of Chemistry) and 5.4 [Preliminary Arrangements for 38th General Assembly (Guildford, 1995)], and discussion was unnecessary.

2/92 MINUTES OF 115th and 116th MEETINGS OF EXECUTIVE COMMITTEE

2.1/92 Amendments and Approval of Minutes

The Minutes of the meetings at Pretoria (circulated by the Executive Secretary 91.07.15) and at Hamburg (circulated by the Executive Secretary 91.10.18) were approved, subject to insertion of the wording

"on behalf of the National Committee of Soviet Chemists"

after "Therefore," in line 2 of Minute 18.1/91.

2.2/92 Matters Arising

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

3/92 MINUTES OF 60th and 61st MEETINGS OF BUREAU/36th COUNCIL AND MATTERS ARISING

The Minutes of the 60th Bureau (Hamburg) were recorded as having been received officially by the Executive Committee. The Executive Secretary regretted that, due to an overload of other priority commitments, the minutes for the 61st Bureau and 36th Council meetings had not yet been drafted.

3.1/92 Proposed IUPAC-UNESCO Initiative in Latin America
(Minute 3.2.3/91)

Prof. Jeannin reported that only Brazil had responded (Chile replied this year!) to his invitation (91.10.18) to national chemical societies in Latin America about a lecture tour by Prof. J. Rouxel. The UNESCO contract money for 1991 had therefore been lost. However, the Executive Secretary had learned recently that a new contract would be issued for 1992. Prof. Jeannin

proposed to try a different approach this time, by contacting university chemistry departments, though there might be difficulty in obtaining their addresses. Prof. Staab offered to help in this respect. Prof. Bard encouraged Prof. Jeannin to continue his efforts, and suggested that the coverage should be extended to Central America, especially Mexico.

3.2/92 Collaboration with International Organization for
Chemical Sciences in Development (Minute 3.2.3/91)

The Secretary General reported that, at a meeting in Netherlands earlier in the year attended by Dr. R. Maybury (Executive Director, IOCD), Dr. H. P. van Leeuwen (Secretary, LLTC Commission on Environmental Analytical Chemistry) and himself, it was concluded that collaboration would be fruitful. IOCD could take care of strategic and operational aspects, and it was able to raise funds for the solution of local problems. IUPAC could mainly take care of the science, especially the standardization of protocols for environmental chemical analysis on a global scale with emphasis on developing countries.

The Executive Committee agreed that:

- (i) Dr. J. Buffle and/or Dr. van Leeuwen (Chairman and Secretary of IUPAC's LLTC) and Prof. V. A. Koptug (Chief Coordinator, IUPAC-CEP) should represent the Union on a joint Working Group;
- (ii) up to USD 3 000 from the UK Royal Society Contributions to Development Activities (Minute 8.9/92) should be made available to facilitate the IUPAC participation at its meetings;
- (iii) the Secretary General should inform ICSU, COSTED, and SCOPE about this activity, which might obtain financial support from these sources.

If additional money was needed, the President suggested that it might be drawn from the 1992-3 funding for CEP.

3.3/92 Computerization of Nomenclature (Minute 3.2.6/91)

Prof. E. Fluck had approached all organizations, which he knew to be involved in computerization of nomenclature for chemical compounds. The material collected therefrom had been duly passed for the attention of the Commissions on Nomenclature of Inorganic Chemistry and of Organic Chemistry. The Commissions had been advised that President Bard thought this to be an important issue, and that they should set up cooperative programmes with groups working on computerization of nomenclature, such as Chemical Abstracts Service and Beilstein. The replies from the two Commission Chairmen were noted by the Executive Committee, which recommended that the matter should be reviewed at Lisbon. Meanwhile, Prof. Staab should monitor progress during his critical assessment interviews with the relevant Division Presidents at the time of the 1992 Bureau meeting.

3.4/92 N/E Committee Recommendations (Minute 4.2/91)

The President drew attention to his exchange of correspondence earlier in the year with Dr. H. C. Rowlinson (Canadian National Committee for IUPAC), in respect of dissatisfaction amongst delegates to Council at Hamburg about the Bureau recommendations for filling vacancies for Elected Members of the Bureau. Prof. Bard presumed that the suggested changes applied to the first paragraph of Bylaw 2.222. The matter was deferred for further consideration under agenda item 7.9.4 (Minute 7.9.4).

3.5/92 Regional Bodies and Associated Organization Status
(Minute 4.11/91)

The Secretary General referred to Dr. Good's reservations about accepting EURACHEM for AO status, and to similar concern expressed subsequently by Dr. J. Rouquerol (92.02.07). Prof. den Boef felt some doubts about the "political" implications of EURACHEM, otherwise he was not against purely scientific regional bodies becoming AOs. Dr. Good agreed, but stressed that the quality of the science should also be acceptable to IUPAC. In addition, Prof. den Boef said that care should be exercised, if an applicant AO had economic implications, e.g., AOAC: the advice of a relevant Division/Section President should always be sought. Prof. Bard pointed out that both Calorimetry Conferences mentioned by Dr. Rouquerol should feel free to apply for AO status. Prof. den Boef was asked to look carefully, during his forthcoming four-years review of existing AOs for Lisbon (Bylaw 5.5), at the activities of EURACHEM.

3.6/92 Annual Service Charge for Associated Organizations
[Minute 11.2(i)/91; see also Minute 2.2.5/92,
Finance Committee - Zürich]

The poor response from AOs (as at 92.05.11), despite a reminder, to the institution of a service charge of USD 100 for 1992, was noted. The Executive Secretary drew attention to the interest of the International Commission on Applications of the Mössbauer Effect in receiving only CI and the IUPAC Handbook, but at a reduced cost. The Executive Committee asked the Treasurer, in conjunction with Dr. Williams, to come forward to the 1992 Bureau with a suggestion for a compulsory minimum service charge from 1993 onwards, to include the provision of CI and the Handbook.

3.7/92 IUPAC-IUPAP Transfermium Working Group
(Minute 12.2/91)

Recent correspondence in respect of publication of the Phase (ii) report, initiated by the Berkeley Laboratory, was noted. Publication by IUPAC in PAC had been suspended. Prof. Jeannin pointed out that this report, unlike that for Phase (i), had purposely not been sent to the laboratories at Berkeley, Darmstadt, and Dubna, because they were emotively involved and unlikely ever to reach agreement. After careful consideration the Executive Committee decided that:

- (i) use of the word "endorsed" in Minute 12.2/91 was unfortunate, and the Bureau should be recommended to replace it by "received" before approving the Minutes of the 60th Meeting;
- (ii) copies of the Phase (ii) report, as it would be printed in PAC, should be sent officially by IUPAC to the laboratories in Berkeley, Darmstadt, and Dubna, inviting their comments within three months for publication with the report;
- (iii) the Chairman of the Transfermium Working Group and IUPAP should be informed accordingly.

3.8/92 Proposal to Establish IUPAC Awards Programme
(Minute 11.4/91)

Progress was noted regarding the Thieme-IUPAC Prize in Synthetic Organic Chemistry and its initial award to Prof. S. L. Schreiber (Harvard University,

USA). The President indicated that he would now approach some other sources about additional IUPAC awards.

4/92 MINUTES OF MEETINGS OF:

4.1/92 Finance Committee (91.08.11 and 92.02.17-18)

The Minutes of the meetings at Hamburg and Zürich were recorded as having been received officially by the Executive Committee.

4.1.1/92 Internal Audit of IUPAC Accounts (Minute 2.2.1/92)

Two matters were raised by the Treasurer, following recent visits to the Secretariat by the Internal Auditor, Dr. S. S. Brown, and arising from his examination of the Union's system of claiming expenses:

- (i) A note had been introduced by Prof. Ward on the revised claim form, enabling Titular Members to claim the cost of normal insurance against cancellation of air ticket, illness, and accident to person or baggage. He was concerned about the level of such insurance premiums (cf. limits set by ICSU), and especially about whether the Union was liable, if a claim was lodged against it in respect of, say, death in an air crash. Details were being obtained from ICSU about the common accidents insurance cover for its Secretariat staff and Executive Board members: it had been too difficult to take out insurance cover for all classes of ICSU members. Some Titular Members of IUPAC were undoubtedly insured fully by their employers and, in the opinion of Dr. Good, non-Titular Members were not a financial responsibility of the Union. The Treasurer was requested to explore the matter further and to take expert advice, meanwhile leaving the note about insurance on the claim form.
- (ii) Reservations were expressed about Dr. Brown's recommendation for a Commission Officer to check on flight numbers and dates together with ticket costs for non-General Assembly meetings. However, bearing in mind that Titular Members often had to raise significant contributions for travel from their "own" resources for such meetings, the Executive Committee decided not to proceed with the recommendation. Attendance at a General Assembly could be monitored through their registration.

4.1.2/92 Treasurer and CHEMRAWN Committee/CHEMRAWN Finances (Minute 2.2.4/92)

The Executive Committee was pleased to note that the Treasurer had reached full agreement with the new Chairman of the CHEMRAWN Committee, Dr. A. Hayes, on the financial principles for CHEMRAWN operations.

4.1.3/92 Building Fund (Minute 2.2.6 and 7.2/92)

The Treasurer drew attention to the actions taken, following acceptance of his recommendation in the Finance Committee report to Council at Hamburg to move part of the Union's assets into a Building Fund.

4.1.4/92 Statement of Accounts for 1991 [Minutes 4.1 and 9(iii)/92]

The Treasurer pointed out some significant income and expenditure deviations in the 1991 accounts compared with the budget. Also, he had accepted the

recommendation of the External Auditor to adopt slightly different conventions in respect of some items in the accounts, leading to an revised excess of expenditure over income of USD 161 602 for the year. The performance was much as expected. Prof. Ward drew attention to a mechanism, suggested by the Internal Auditor, which would facilitate earlier publication of the annual accounts in CI: the 1991 accounts had accordingly been passed by the Finance Committee, on behalf of the Executive Committee, for audit immediately after its meeting earlier in the year. There was "no protest" from the Executive Committee, and the audited accounts (Appendix A) would be presented to Council at Lisbon. It was noted that a new "user friendly" format would be used for the 1992 accounts and thereafter.

4.1.5/92 Secretariat Computer Facility Development/Capital Budget (Minutes 4.3 and 4.4/92)

The Treasurer explained that hitherto the cost of capital equipment had appeared in the revenue account, even though in some latter instances these had been accompanied by a note that the costs would be met from assets. Although it was customary to set the cost of capital items against assets, it was general practice to produce a capital budget for those items alongside the revenue budget. Accordingly, a capital budget for 1992 had been prepared, covering modifications to the Secretariat offices, to meet new fire regulations, to optimize the efficiency of the computer network, and for some small further additions needed to complete refurbishment of the Secretariat. The Executive Committee approved the capital budget for 1992 in total, thereby clearing the way for more modest budgets during the next several years. The President suggested that provision should be included in the 1993 capital budget for access of the Secretariat to electronic mail.

4.1.6/92 National Subscriptions [Minute 6(ii)/92]

The Executive Committee noted that, being outstanding at 91.12.31 in respect of its subscriptions for 1989, 1990, and 1991, Cuba had automatically ceased to be a Member of the Union (Statute 9.2). Furthermore, Bulgaria was unable to pay the invoiced subscription for 1991 of USD 5 100. Despite the encouragement of ICSU to waive the subscription (92.04.13), it was decided to offer Bulgaria a reduced sum of USD 2 000. If this was acceptable, the Executive Committee agreed to write off USD 3 100 from the provision for bad debts. The President asked that this should be considered, in effect, as a loan: even if it was never reclaimed by the Union, it should be shown as such on the revised invoice.

4.1.7/92 Budget for 1992-3/Supplementary Allocations
[Minutes 9(i) and (ii)/92]

The Treasurer pointed out that the transfer from publications to general purposes in 1992 was expected to be lower than forecast at Hamburg, and that no provision had been made to purchase copies of CI for IUPAC members from general funds. However, as a consequence of the slightly different accounting conventions adopted following the audit for 1991, there were now supplementary assets of USD 72 085. Nevertheless, noting the substantial decrease in supplementary assets from 1990 (USD 595 845, when the total financial assets peaked), bringing supplementary assets to their lowest level for more than ten years, the Executive Committee agreed that it was inopportune to invite requests from IUPAC bodies for supplementary allocations. The Secretary General suggested that the USD 72 085 should be made available at Lisbon for the Divisions in the next biennium.

Prof. Ward raised the following matters for consideration by the Executive Committee:

- (i) Should retrospective claims be allowed in respect of a meeting earlier in the year of a subcommittee of the Commission on Atomic Weights and Isotopic Abundances? The Executive Committee was strongly against any retrospective payments.
- (ii) Bearing in mind revised Bylaw 4.307, should there be greater flexibility between General Assemblies in respect of payments to subcommittees by Division/Section Presidents? The Executive Committee was in favour of such flexibility, and it asked the Treasurer and Secretary General to draft guidelines on the right to receive expenses [see also Minute 6.1(iii)/92].

4.2/92 CHEMRAWN Committee (91.08.12 and 91.12.02)

The Minutes of the meetings at Hamburg and Baltimore were recorded as having been received officially by the Executive Committee. The financial outcome of CHEMRAWN VII was noted with satisfaction. Prof. Zamaraev reported that Prof. V. A. Koptug would be mailing out the second circular/registration form for CHEMRAWN VIII from Moscow on 92.05.27.

4.2.1/92 Royalties Arising from Perspectives in Catalysis
(Minute 11.3(iv)/91, 60th Bureau)

Now that CHEMRAWN finances were in good order (Minute 4.1.2/92), the Executive Committee felt that it was unnecessary to reconsider the decision (Minute 4.2/89, 57th Bureau - Lund) not to make available royalties arising from the Chemistry for the 21st Century monograph for CHEMRAWN purposes. Prof. Zamaraev recommended that Prof. J. M. Thomas should be advised accordingly.

4.3/92 Committee on Affiliate Membership (91.08.11)

The Minutes of the meeting at Hamburg were recorded as having been received officially by the Executive Committee.

4.3.1/92 Delegates to Council as Observers at CAM
(Minute 3.2.8/91, 60th Bureau)

The Executive Committee reviewed the decision of the Bureau, that any delegates to Council, who were responsible for operating AMP in their respective countries, should be invited to sit in as observers at the meeting of CAM in Lisbon. Prof. Staab agreed to reconsider the matter at the 1992 meeting of CAM, in order to decide whether to implement the decision and how.

4.3.2/92 Future Role of AMP in IUPAC

The President reported that ACS was willing to offer its journals at membership subscription rates to IUPAC affiliates worldwide, even to those who were not members of ACS. Subject to the agreement of CAM, he hoped that this facility could be extended by the Affiliate Affairs Secretary to other national societies (France, FRG, Japan, Sweden, Switzerland, UK).

On assuming the Presidency of the Union after Lisbon, it was agreed that Prof. Staab should stand down as Chairman of CAM. The Secretary General suggested that Council should officially review the continuation of AMP in 1995 (cf. Minute 12/89, 35th Council - Lund).

4.4/92 Committee on Chemical Databases
(91.08.09-11 and 91.12.08)

The Minutes of the meetings at Hamburg and London were recorded as having been received officially by the Executive Committee.

4.4.1/92 IUPAC Database Procedures Guidelines

The Executive Committee approved the Guidelines (Appendix B) prepared by CCDB, and agreed that they should be published in CI and the IUPAC Handbook.

4.5/92 Committee on Chemistry and Industry (91.08.12-13)

The Minutes of the meeting at Hamburg were recorded as having been received officially by the Executive Committee.

4.5.1/92 Proposed "Chemistry for Life" Programme
(Minute 7/91, 60th Bureau)

The Executive Committee noted that, when COCI met at Stockholm (92.09.04-05), the creation would be proposed of a Core Committee, responsible for all activities placed under the heading "Chemistry for Life". The intention was that the input could be screened and distributed to different modules, each of which would offer the Union an opportunity for specific activities on a global/regional or national level. It would be opportune for the COCI Chairman, Prof. A. E. Fischli, to report on the deliberations in Stockholm to the Bureau in Oxford. The Executive Committee was keen to encourage the proposal, although Prof. Bard was anxious that it should be a success. He recommended that COCI should contact ACS and the chemical manufacturing associations in USA and elsewhere in the world for advice.

4.5.2/92 2nd IUPAC Workshop on Safety in Chemical Production

After considering the completed Advance Information Questionnaire for the Workshop (Yokohama, Kanagawa, Japan: 93.05.31-06.04), and noting the financial guarantee given by the Japanese Chemical Industry Association, Chemical Society of Japan, and Japanese Society of Chemical Engineers, the Executive Committee agreed that the official sponsorship of IUPAC should be granted.

4.6/92 Interdivisional Committee on Nomenclature and Symbols (91.08.06-07)

The Minutes of the meeting at Hamburg were recorded as having been received officially by the Executive Committee.

5/92 FUTURE GENERAL ASSEMBLIES AND CONGRESSES

5.1/92 Arrangements for 37th General Assembly
(Lisbon, 1993)

(i) The Secretary General said that, following requests made at and after Hamburg, consideration had been given to whether the present nine-days schedule for the General Assembly could be reduced. By confining the number of meeting days for Commissions to two and a half, the Executive Committee noted that the Assembly could be shortened to eight days. It agreed to try such a schedule as an experiment at Lisbon.

(ii) A report was tabled from the Deputy Executive Secretary, following her recent visit to Lisbon (92.05.06-10). The Treasurer was concerned that the IUPAC per diem for Portugal of USD 125 in 1992 was insufficient for single rooms in some hotels plus meals, and at the requirement for participants to pay the travel agency in full by 93.06.15. The Local Organizing Committee would press the agency to accept advance payment of one night's accommodation on confirmation of reservation. On the recommendation of the Officers, the Executive Committee approved:

- a. a per diem for the Assembly of USD 110, in order not to exceed the agreed total budget of USD 520 000;
- b. all subsistence, if possible, to be paid in national currency at Lisbon, in order to maximize interest on IUPAC funds in Zürich until the Assembly.

(iii) The following decisions were made in respect of requests to meet in Lisbon in part/full prior to the Assembly:

- a. IDCNS could meet on Day -2 and Day -1;
- b. CTC could meet in accordance with the suggestions made by the Deputy Executive Secretary (92.03.20);
- c. Commission on Nomenclature of Inorganic Chemistry could meet on Days 2-4, as suggested by its Chairman, with payment of subsistence for four days (one travel day included);
- d. Commission on Nomenclature of Organic Chemistry could meet for four days, including Day -1, with payment of subsistence for five days (one travel day included);
- e. Commission on Macromolecular Nomenclature could meet for four days during the Assembly, with payment of subsistence for five days (one travel day included).

5.2/92 Arrangements for 34th Congress (Beijing, 1993)

The Chinese Chemical Society had confirmed (92.05.12), that the official IUPAC wording about the granting of entry visas would definitely be printed in the second circular, which was due to be distributed during August 1992. The President would request an assurance that participants from the host country, who were presently working abroad, would be granted exit visas to leave after the Congress finished.

5.3/92 Preliminary Arrangements for 35th Congress (Istanbul, 1995)

The Executive Secretary reported on his visit to Istanbul earlier in the year (92.03.30), drawing attention to the proposed scientific programme. He had advised the local organizers to request officers of relevant IUPAC bodies to comment on the proposals prior to the 1992 Bureau, when the programme would be evaluated critically (Statute 13.1). The President felt that the headings for the main sections were too wide in scope.

5.4/92 Invitations for 39th General Assembly/36th Congress (1997)

An invitation from Brazil, to host the Union's General Assembly and Congress in 1997 at Rio de Janeiro on the occasion of the 75th anniversary of

Associação Brasileira Química, had been noted by Council at Lund [Minute 23(ii)/89, 35th Meeting] and renewed prior to Hamburg. Subsequently, the Secretary General had invited all NAOs to submit invitations to host these events (92.01.24). Invitations had been received so far from Argentina and Switzerland, and the Executive Secretary was exploring location of the General Assembly in Austria, but elsewhere than Vienna. The Executive Committee noted that the costs of air travel to the Union for the Assembly in Argentina and Brazil would be rather high. Therefore, it asked Prof. den Boef and Dr. Williams to investigate Austria (Graz and Innsbruck) and Switzerland in respect of the Assembly, and to report back to the 1992 Bureau.

6/92

RESTRUCTURING OF IUPAC

6.1/92

Reconsideration of Prof. Jeannin's Recommendations
[Minute 4.6(iii)/91, 60th Bureau]/Response to
Secretary General's Circular (92.01.08) re
Programmes, Commission Structure, and Membership/
Priorities for Future Activities [Minute 9(ii)/92,
Finance Committee]

(i) The Executive Secretary reported that, in accordance with the Bureau decision at Hamburg, all ten-years old non-nomenclature/symbols projects had been eliminated from *IUPAC Handbook 1991-1993*: they were no longer to be funded by the Union. In respect of possible discontinuation by Lisbon of all nomenclature/symbols projects more than ten years old, Dr. Williams was requested to provide a listing for consideration at the 1992 meeting of the Bureau.

(ii) Responses to the Secretary General's circular letter to IUPAC bodies (91.10.22), about only accepting proposed National Representatives if there was no other membership from the relevant countries, had been considered by the Officers (Amsterdam, 91.12.08). A few exceptions were agreed for special reasons. It was agreed to propose that Bylaw 4.305(i) should be amended by Council at Lisbon (Minute 7.9.7/92).

(iii) Prof. Jeannin's paper on rationalization and guidelines for subcommittees (Appendix B to Minutes of 60th Bureau) was reconsidered by the Executive Committee. Amendments were agreed (Appendix C), and the revised guidelines should be consolidated with those to be drafted by the Treasurer and Secretary General on the right to receive expenses [Minute 4.1(ii)/92].

(iv) The Secretary General said that, although the response was disappointing to his circular letter to Officers of IUPAC bodies (92.01.08) on restructuring, many valuable comments had been made. His summary paper, tabled at the meeting, formed the basis for further discussion by the Executive Committee. The President favoured the concept of Commissions submitting plans for new projects well in advance of a General Assembly. This would allow Division/Section Presidents and their Committees to consider the plans and to obtain external reviews before the Assembly. Also, it would encourage Commissions to do more work by correspondence between Assemblies. Furthermore, it might be possible to link the concept into the biennial budget preparation.

There was an extended discussion on these matters, with Prof. den Boef preparing an overnight summary for further consideration on the second day. Concerning priority of projects, there was general agreement that a Division/Section President should at least place them into three groups:

high, medium, low. Prof. den Boef preferred Division/Section Presidents to be responsible for external refereeing of projects, especially as to their high priority assessment. However, Profs. Bard and Jeannin both supported an option for the Union's Vice-President to use external refereeing, if he had time, in conjunction with the biennial critical assessment.

The Secretary General agreed to prepare a further paper, summarizing the outcome of the response to his circular letter and incorporating the consensus views reached at Dublin (Appendix D). This paper should be reviewed urgently by the Executive Committee by correspondence, and then disseminated to Officers of IUPAC bodies prior to the 1992 meeting of the Bureau. If the concept of advance submission of plans for new projects was accepted by the Bureau, it might be introduced "imperfectly" at Lisbon.

(v) Prof. Bard was still anxious about the lack of progress concerning the existing structure of the Divisions and Commissions. Agreement was reached by the Executive Committee on the status of LLTCs created at Lund and on proposals for the electrochemistry and spectroscopy Commissions (Appendix D). If a publishing contract for the Solubility Data Series could not be established with another publisher [Minute 9.3(i)/92], Commission V.8 might have to re-integrate with the Commission on Equilibrium Data. Dr. Good favoured integration of all IUPAC work on critically assessed thermodynamic data. Prof. Staab was asked to consider this matter in his critical assessment, and also to monitor the Applied Chemistry Division carefully.

(vi) In the opinion of the Treasurer, the Executive Committee/Bureau must also decide on priorities for the future activities of the Union relative to its income. He was not convinced that IUPAC should - or even needed to - involve in such broad mission-oriented programmes as those on the environment and on advanced materials which would, in any case, be tackled elsewhere. The Union should concentrate on its traditional objectives of studying topics of international importance to pure and applied chemistry, which needed regulation, standardization, or codification (Statute 2.2).

6.2/92 IUPAC and Oceanography

In his biennial critical assessment for 1990, Prof. Bard had pointed out that CHEMRAWN IV presented many different areas, which could be subjects for important studies by the Commission on Water Chemistry (VI.6). The late Dr. L. E. Coles was aware of the matter, but his untimely death may have prevented its discussion by the Applied Chemistry Division at Hamburg. The Commission Chairman had suggested (92.03.16) to set up an LLTC on the subject, but Prof. Bard felt that such work should be undertaken within Commission VI.6 itself. The Secretary General was keen to encourage IUPAC collaboration with ICSU's Scientific Committee on Oceanic Research, but only after Commission VI.6 appointed some oceanographers to its membership.

6.3/92 Surveying Chemists Outside IUPAC for Projects [Minute 4.6(ii)/91, 60th Bureau]

The President said that he was keen to learn from the Information Officer by the 1992 meeting of the Bureau about any advice and recommendations from chemists worldwide, on projects which might be addressed within IUPAC programmes, arising from Prof. Bard's letter currently being published in various chemistry and science magazines and journals. In addition, Prof. Bard wished Dr. Freemantle to make a direct approach to the actual editors to solicit suggestions from them.

6.4/62 IUPAC Chemistry and Environment Programme

6.4.1/62 Minutes of Meeting (91.08.06)

The Minutes of the Coordinating Committee meeting at Hamburg were recorded as having been received officially by the Executive Committee.

6.4.2/92 Allocation of 1992-3 Funds for IUPAC Projects

The President was perturbed at delay by the Chief Coordinator in deciding about allocating money from the 1992-3 CEP funds for various projects submitted by IUPAC bodies since Hamburg. Prof. Zamaraev promised to ask Prof. Koptug to complete his decisions, even if negative, especially in respect of recycling of polymers. However, he said that a copy of any telefax to Prof. Koptug should always be sent also by mail, and that he should be requested in any telefax to confirm its receipt by him. The Secretary General agreed to review the present CEP financial allocation mechanism at the 1992 meeting of Division/Section Presidents, which Prof. Koptug would attend. On that occasion it should be considered, whether it would be worthwhile to convene a meeting with Prof. Koptug at Lisbon of funded project leaders.

Dr. Good was anxious to continue coordination of environmental activities within the Union after Lisbon, even if financial support thereafter was only to be available from Division/ Section funds.

6.4.3/92 Proposed Supplement to IUPAC's Chemistry and the Environment Booklet

The Executive Secretary reported that existing stocks of the 1990 booklet were expected to be exhausted by the end of the year. Prof. Koptug felt that it was desirable to publish at the start of 1993 a supplement or a revised booklet with the inclusion of new material. The President proposed that the existing information should be updated in CI, drawing on the Current Programmes section of *IUPAC Handbook 1991-1993* and with the ancillary text provided by Prof. Koptug. If there was sufficient material, it might constitute a "special issue" of CI.

6.4.4/92 8th ICSU-SCOPE General Assembly

Following the election of Prof. Koptug to the Vice-Presidency of ICSU's Scientific Committee on Problems of the Environment (SCOPE: Sevilla, 92.01.20-25), chemistry was expected to play an expanded role in its current and future projects. It was suggested that Prof. Koptug should address the 1992 meetings of the Division/Section Presidents and Bureau on these issues.

6.5/92 IUPAC Chemistry and Advanced Materials Programme

6.5.1/92 Minutes of Meeting (91.08.12)

The Minutes of the Coordinating Committee meeting at Hamburg were recorded as having been received officially by the Executive Committee.

6.5.2/92 Chairmanship of Coordinating Committee/Allocation of 1992-3 Funds for IUPAC Projects

The President drew attention to his concern about the format, which the CCCAMP meeting was now taking in conjunction with that of the Commission on High Temperature and Solid State Chemistry [Rome, 92.09.25-26: cf. Minute

5.2(iv)/91, 60th Bureau]. The Executive Committee accepted, with regret, the immediate resignation of Prof. C. N. R. Rao as Chief Coordinator of CAMP. The workshop on ceramics should proceed as originally planned, with Profs. R. Metselaar and J. Rouxel representing CCCAMP. Prof. Bard would investigate whether Profs. K. L. Komarek and J. Economy were willing to act jointly as Chief Coordinators for CAMP up to and including the meeting of CAMP at Lisbon, otherwise CCCAMP might have to be dissolved immediately. Prof. Economy should be invited to meet with Prof. Komarek at the time of the 1992 meeting of the Bureau. Prof. Bard shared the concern of Dr. Good, that active collaboration had not apparently been initiated of IUPAC with the new International Union for Materials Research Societies [Minute 5.2(v)/91, 60th Bureau].

6.6/92 Current Programmes

The Secretary General said that the precirculated letter from the Deputy Executive Secretary (92.03.16) and attachments thereto should be regarded as a "preliminary text", which he might refine and amend for presentation at the 1992 meeting of the Bureau.

6.7/92 Proposal for LLTC on Recycling of Polymers

A proposal (92.04.21/amplified 92.05.18) was considered from Prof. W. Heitz to form an LLTC, whose objective would be to prepare the final recommendations ("future actions group") for a CHEMRAWN Conference on recycling of polymers in 1994. The Executive Committee agreed with the Secretary General, that a Macromolecular Division working party was preferable to an LLTC. Prof. den Boef should advise Prof. Heitz that the Macromolecular Division could make a start accordingly, even in 1992: priority financial support should be provided from the 1992-3 funds for CEP or as an advance against an ICSU grant in 1993 (the Secretary General had applied for USD 6 200 for this subject: see Minute 8.1.5/92).

7/92 IUPAC BODIES

7.1/92 Ratification of Memberships Approved by Correspondence

The appointments, which had been made through correspondence by the President since the 60th Bureau meeting (Appendix E), were ratified by the Executive Committee.

7.2/92 Nominations of New Members

The Executive Committee approved the proposed new memberships for the Editorial Advisory Boards of PAC, CI, and Monographs on Chemistry for the 21st Century, for the Committee on Student-oriented Nomenclature Book, for CTC, and for IDCNS (Appendix F).

7.3/92 Persons with More than Three IUPAC Commitments
(Minute 15.2.5/78, 91st Executive Committee - Brussels)

The Secretary General had examined a listing, prepared by the Deputy Executive Secretary, of all persons with three or more IUPAC commitments. The Executive Committee accepted his recommendation, that no action should be taken for the present biennium in the case of the only serious transgression, namely of Prof. P. De Bièvre (ten commitments). Prof. Jeannin was concerned that multiple commitments, even as IUPAC representatives or as members of

subcommittees (Minute 7.5/80, 95th Executive Committee - Villefranche-sur-Mer), prevented the turnover of IUPAC membership.

7.4/92 Terms of Reference of IUPAC Bodies

The President said that, in the case of minutes issued by various IUPAC bodies from their meetings at Lund and Hamburg, sometimes revised terms of reference were included. The attention of all IUPAC bodies had, therefore, been drawn (92.03.27) to Bylaw 4.301, which implied that any changes to their approved terms of reference must also be approved by Council. Furthermore, he had directed that the terms of reference from 1989-1991 should be republished without change in *IUPAC Handbook 1991-1993*.

Various requests for additions/changes to existing terms of reference were considered by the Executive Committee, and they were accepted for approval by Council at Lisbon (Appendix G). Noting a letter from Prof. R. A. Alberty (92.02.04), Dr. Good felt that the existing terms of reference for the Physical Chemistry Division were far too general. They should be made more specific when revised at Lisbon: this applied also to the other Divisions of the Union and to the Section on Medicinal Chemistry.

7.5/92 Composition and Terms of Office/Terms of Reference for Monographs on Chemistry for 21st Century-Editorial Advisory Board

(i) As an exception to the Bureau directive (Minute 10.1.3/90, 59th Meeting - Milan), the Executive Committee accepted the proposal of Prof. Zamaraev, that Dr. B. W. Langley should represent COCI on the Monographs-EAB. If necessary, financial support should be provided from the BSP travel funds. In addition, it was agreed that representation from the CHEMRAWN Committee should be allowed.

(ii) Composition and Terms of Office/Terms of Reference, proposed by Prof. Zamaraev for the Monographs-EAB, were approved as Standing Orders from the Executive Committee, subject to amendment as (i) above (Appendix H).

7.6/92 Revised Inorganic Chemistry Division Rules

Proposed amendments to the Inorganic Chemistry Division Rules (*IUPAC Handbook 1989-1991*, pages 233-4), submitted by Division President K. L. Komarek (91.10.28), were noted by the Executive Committee. They would be referred to the 1992 meeting of the Bureau.

7.7/92 Working Party on Fullerene Nomenclature and Terminology (Minute 9/91, 60th Bureau)

At Hamburg Prof. Bard was concerned that the Union should take quicker action about nomenclature for newly emerging areas of chemistry. Subsequently, he had taken steps to form a Working Party on Fullerene Nomenclature and Terminology. Prof. F. Wudl (USA) had agreed to act as Chairman, and the Commissions on Nomenclature of Inorganic Chemistry and of Organic Chemistry had nominated members (Prof. F. Feher and Mr. E. W. Godly, respectively). The Working Party would be associated with the Commission on High Temperature and Solid State Chemistry, which had previously worked on terminology and characterization of carbon. Prof. Bard felt that the initial work could be undertaken by correspondence during 1992, but a meeting would probably be essential in 1993 (financed from budgeted "Other Expenses") in order that recommendations were available by Lisbon.

7.8/92 Task Force on Scientific Aspects of Destruction of Chemical Warfare Agents

A draft document from Prof. J. F. Bunnett (92.02.04), providing information about the IUPAC Task Force - a subcommittee of the Organic Chemistry Division - and its work, was noted by the Executive Committee. Some concern was expressed about overlap with another similar initiative in USA. Financial support was still being sought from outside the Union: Dr. Good suggested that it might be possible to draw on funding established recently in USA for helping newly "non-employed" weapons scientists.

7.9/92 Changes to Statutes and Bylaws

7.9.1/92 Past-President as an Officer of the Union
(Minute 3.2.4/91, 60th Bureau)

The Bureau would be asked to recommend Council to change Statute 6.1 to read:

"The Officers of the Union shall be the President, the Vice-President, the Past-President, the Secretary General, and the Treasurer, and they shall be elected at a regular meeting of the Council."

7.9.2/92 Macromolecular Division Rules/Coopted Membership and Consultants (Minute 3.2.5/91, 60th Bureau)

At Hamburg the Council had agreed to accept revised Macromolecular Division Rules, subject to relevant changes to the Statutes and Bylaws being prepared by the Executive Committee (Bureau) for Lisbon. The Czechoslovak National Committee for Pure and Applied Chemistry should be requested to draft in writing, for consideration by the Bureau in 1992, the exact changes it wished to propose to the Statutes and Bylaws.

7.9.3/92 Proposed Assignment of Votes to Delegations in Council

A proposal to change "1-6" to "1-8" in Statute 5.1 had been narrowly defeated in Council at Hamburg. The US National Committee for IUPAC was expected to ask for the proposal to be represented at Lisbon.

7.9.4/92 Principle of Fair Geographical Representation
(Minute 4.2(vi)/91, 60th Bureau]

The Bureau would be asked to recommend Council to retain the principle of fair geographical representation in Statute 7.2, but to change "shall" to "may" in the third sentence of the first paragraph of Bylaw 2.222.

7.9.5/92 Revised and Shortened Procedures for Publication of IUPAC Recommendations (Minute 9/91, 60th Bureau)

Further to IDCNS's redrafted "Procedure for Comment and Approval of IUPAC Recommendations on Nomenclature and Symbols", the Bureau would be asked to recommend Council to change "eight" to "five" in the second sentence of the second paragraph of Bylaw 2.11.

7.9.6/92 Priority Ranking List of Commissions

Consideration of the matter was deferred, pending a submission from the Canadian National Committee for IUPAC to change Statute 7.42 and Bylaw 4.302,

so that each Division/Section would be required to provide a priority ranking list of its Commissions.

7.9.7/92 Restricting Appointment of National Representatives

Further to the agreement reached earlier in the meeting [Minute 6.1(ii)], the Bureau would be asked to recommend Council to change the second sentence of Bylaw 4.305(i) to read:

"A Commission may coopt not more than one such representative from an Adhering Organization, but no such representation shall be permitted if the Commission already has a Titular or Associate Member from that Adhering Organization, unless exceptional circumstances are established and special permission granted by the Bureau."

7.9.8/92 Miscellaneous Matters

In response to some miscellaneous matters raised by the Executive Secretary, the Executive Committee:

- (i) saw no definite advantage in introducing a statute in respect of Observer Country membership;
- (ii) preferred to retain the ten-years and twelve-years limitations of period of service for Commissions (Bylaw 4.304), but to eliminate the ten-years limitation for Division/Section Committees (Bylaw 4.103);
- (iii) preferred not to allow ordinary (non-Officer) Members of Division/Section Committees a possibility to serve two consecutive terms of four years (Bylaw 4.103, cf. Bylaw 4.304 for Commissions).

* * *

The Executive Committee asked the Secretary General, in conjunction with the Executive Secretary, to draft the necessary changes to the Statutes and Bylaws for presentation to the Bureau in 1992.

8/92 RELATIONS WITH OTHER ORGANIZATIONS

8.1/92 ICSU Matters

8.1.1/92 Chemical Weapons/Chemistry and Energy Supplies
[Minutes 12.1(i) and (ii)/91, 60th Bureau]

The ICSU Executive Board had asked IUPAC (92.05.13) to advise it:

- (i) Re Weapons of Mass Destruction - on the terms of reference for the work of an ad hoc group to continue the feasibility study begun by SCOPE and on the unique contribution which ICSU could make through such a study.
- (ii) Re World Energy Supplies - whether ICSU had a unique contribution to make in this area.

Noting the lack of enthusiasm of the ICSU Executive Board for IUPAC's two proposals and the recent resignation of Prof. T. S. West (initiator of the proposals) as Chairman of ICSU's Standing Finance Committee/Executive Board,

present financial restrictions of IUPAC now precluded the Union taking a leading role in such additional mission-oriented programmes at the expense of IUPAC's core activities.

8.1.2/92 Proposal for Creation of an Interdisciplinary Cooperative Network to Enhance Availability of Scientific and Scholarly Publications [Minute 12.1.1/91, 60th Bureau]

The Executive Secretary reported that there had been a misunderstanding on this matter. Prior to Hamburg the Information Officer had already completed the ICSU donor database proforma and indicated that IUPAC was willing to publicize the donation services. The Executive Committee agreed that Dr. Freemantle should proceed accordingly, but he should not over-commit the IUPAC Secretariat.

8.1.3/92 International Conference on an Agenda of Science for Environment and Development into the 21st Century

The Executive Committee noted that the Union had been represented at ASCEND 21 (Vienna, 91.11.25-29) by Prof. Koptug, and that the final conference statement - identifying ways to enhance environment and development efforts - had been published in CI [14 (3), 90-96 (1992)].

8.1.4/92 Meeting of Secretaries General and Executive Secretaries/Directors of International Scientific Unions

The Secretary General elaborated briefly on his precirculated report (March 1992), drawing attention to the lower cost to the ICSU budget of its Secretariat compared with IUPAC. The Executive Committee asked Prof. den Boef to make clear to ICSU the willingness and the wish of the Union to participate more extensively in the work of relevant ICSU interdisciplinary bodies. For example, the programmes of SCOPE were very much geo- and bio(agro-)-oriented, and the expertise of chemistry was insufficiently sought and, if so, most of the time not through IUPAC.

8.1.5/92 1993 ICSU Grants Programme

In view of the lack of money available for scientific work of IUPAC bodies in the 1992-3 budget, the Secretary General had been disappointed at the poor response from Division/Section Presidents with requests for grants from ICSU in 1993. From his knowledge of projects submitted for IUPAC support at Hamburg, which were in the spirit of the aims of ICSU, he had taken an initiative to include some of them in the IUPAC application for 1993. Dr. Good suggested that the matter should be an item for discussion at the 1992 meeting of Division/Section Presidents.

8.1.6/92 Ethics in Modern Science

The Secretary General drew attention to a recent article on *Ethics and Modern Science* in ICSU's *Science International* [No. 45-46, 29-30 (1991)]. In the opinion of the President, the article was rather broad and did not cover all aspects relevant for chemistry, nor did he think the subject was within the present interests of IUPAC-CTC. However, Prof. Staab was in favour of an IUPAC activity in this area, and there was a consensus of support from within the Executive Committee. The Executive Secretary was asked to invite Prof. J. Jortner to prepare a position paper for the 1992 meeting of the Bureau, setting out the various international issues and options (publication, fraud, etc.). If the Bureau reacted favourably, a subcommittee of its Members might

be asked to produce a report for consideration at Lisbon, and ICSU should be advised what was being done by IUPAC.

8.2/92 Academy of Sciences of USSR/Russian Academy of Sciences

(i) The Executive Committee noted that, from 91.12.17-20, the new Russian Academy of Sciences had been declared the official successor organization with respect to international commitments of the former Academy of Sciences of USSR. More recently, RAS had established a National Committee of Russian Chemists with Prof. Koptuyug as Chairman. The latter anticipated (92.04.29) that an official request would be submitted shortly to IUPAC for RAS to be recognized as the NAO for Russia. In addition, it was noted ICSU had recently agreed that the fifteen states, which formerly comprised USSR, would all be considered eligible for automatic admission to ICSU.

(ii) Prof. Zamaraev agreed to provide the names of the Presidents and addresses for the other fourteen academies of science, so that the Executive Secretary could write and invite them to apply for membership of IUPAC.

(iii) The Executive Committee endorsed the view of the President, taken for preparation of *IUPAC Handbook 1991-1993* (92.03.17), that Dr. U. L. Haldna (Commission on Chromatography and Other Analytical Separations) should be listed as a USSR National Representative, but to state Estonia as the country in his address.

8.3/92 Annual Subscription from Peru
[Minute 6(ii)/92, Finance Committee]

Despite the expressed financial hardship of the Peruvian Chemical Society (91.11.13), the Executive Committee decided that it must either remain a full Member of the Union and pay the appropriate national subscription or request a move to Observer Country status.

8.4/92 Chemical Society of Vietnam
8.5/92 Slovenian Chemical Society

Applications for Observer Country status from the Chemical Society of Vietnam (91.09.26) and from the Slovenian Chemical Society (92.03.12), accepted through correspondence by the President, were ratified by the Executive Committee.

8.6/92 Croatian Chemical Society

An application for Observer Country status from the Croatian Chemical Society (92.05.11) was accepted by the Executive Committee.

8.7/92 Chemical Heritage Foundation

Noting that the "holding company" of the Beckman Center and Othmer Library (National Foundation for History of Chemistry) at Philadelphia had recently decided to change its title to the Chemical Heritage Foundation and that the archival records of the Commission on Atomic Weights and Isotopic Abundances were in process of being transferred thereto, the Executive Committee accepted an invitation from the Foundation to serve as an archive for other IUPAC materials. The President agreed to ascertain whether the Foundation was definitely changing its orientation to a more international one, before encouraging an application for Associated Organization status of the Union.

8.8/92 Fondation de la Maison de la Chimie
[Minute 13(ii)/91, 115th Executive Committee]

(i) The Secretary General reported briefly on his visit to the Fondation with Prof. Jeannin and the Executive Secretary (91.12.18). They had been impressed by the historical character of the building and facilities available. However, Prof. den Boef had made it clear that, only after two more years or so, would the Union be in a position to decide on the future location of the Secretariat.

(ii) Prof. Bard had responded favourably to a possible invitation for the IUPAC President or Secretary General to join the Board of the Fondation, and was awaiting confirmation before deciding who should act for the Union starting in 1993. Prof. Jeannin said that an earlier invitation had been misunderstood by Prof. T. S. West, who would be allowed to continue on the Board in a personal capacity.

8.9/92 UK Royal Society Contributions to Development Activities

Division/Section Presidents had been invited (92.03.03) to submit appropriate programmes for the funds currently unallocated. In addition, Prof. Jeannin said that he could probably now release the USD 5 000 earmarked for IUPAC financial support of the Latin-America Initiative (Minute 3.5/91, 115th Executive Committee). The Executive Committee approved a request from the Macromolecular Division in respect of an initiative directed at assisting Third World countries to establish an infrastructure in polymers (USD 5 500). A request for travel support for two participants from Latin America to attend the International Symposium on Macrocyclic Ligands for Design of New Materials (Guildford, UK: 92.09.14-16) was not accepted.

8.10/92 IUPAC Representation at Meetings of International/
Regional Organizations

The President said that care should be taken in accepting invitations, even for official representatives of IUPAC (*IUPAC Handbook 1991-1993*, pages 15-16), for meetings of international/regional organizations. The Executive Committee endorsed his reservations about participating, especially at IUPAC expense, in activities of non-official bodies, which were completely outside the Union and whose work might overlap with that of IUPAC bodies. Regarding a meeting (Erice, Italy: 92.10.14-16) to discuss symbols and notation for use in interdisciplinary scientific areas, such as bioelectrochemistry, it was thought to be preferable for Profs. A. Zichichi/G. Milazzo to come to Lisbon for discussions with relevant IUPAC bodies (Commissions on Electrochemistry and on Electroanalytical Chemistry, Steering Committee on Biophysical Chemistry).

9/92 PUBLICATIONS

9.1/92 Meeting of Publications Committee (91.08.07-09)

The Minutes of the meeting at Hamburg were recorded as having been received officially by the Executive Committee.

9.2/92 Blackwell Scientific Publications

The Executive Committee ratified an Amendment to the Principal Agreement (84.12.31) and Supplemental Agreement (90.06.18) with Blackwell Scientific Publications, signed by the President on behalf of IUPAC (92.04.24).

9.3/92 Pergamon Press

(i) The Executive Committee noted that Pergamon Press had given notice (91.11.29) to terminate the Solubility Data Series Agreement with IUPAC at the end of 1992, and that invitations to take over publication of SDS had been issued to BSP and to World Scientific Publishing Co. Ltd.

(ii) The Executive Committee ratified the proposed prices for SDS volumes in 1992 (subscription price per volume: USD 90.90; single volume price: USD 110.00), accepted through correspondence by the President.

9.4/92 Copyright of Work Done and Supported by IUPAC

The Executive Committee reconfirmed unanimously, that the copyright of any materials generated from an activity, which was undertaken officially under the auspices and with the financial support of the Union, should reside within IUPAC. However, although all such materials should be offered, in principle, first to the official publisher of the Union, it was agreed that some flexibility might be exercised for publication outside the official publisher, especially if there would be wider exposure to the relevant chemical community. The Executive Secretary foresaw difficulties in exercising such flexibility.

9.5/92 IUPAC Handbook 1991-1993

In response to a request from the Secretary General, the Secretariat had given priority to finalization of the crc, so that the date for its delivery to BSP could be brought forward from 1st May to 15th April 1992. An advance copy of the Handbook was scheduled during the first week of June. Preparation of the Handbook had been simplified by a decision of Prof. den Boef not to include the names and addresses of all members of subcommittees.

9.6/92 Monographs on Chemistry for the 21st Century
[Minute 10(iii)/91, 60th Bureau]

Dr. Good said that her concern at Hamburg was simply that there was no review of each actual manuscript prior to publication. She recommended that Prof. Zamaraev, as Chairman of the Monographs-EAB, should use Board Members as reviewers - even external reviewers when necessary - or for a monograph editor to have each contribution reviewed by an external expert. In addition, in order to ensure relevance of material to the 21st century, she was anxious to see younger persons preparing the monographs. Nevertheless, a very positive review had been issued recently of the monograph on *Perspectives in Catalysis* [Nature 356 (23rd April), 671 (1992)]. Some possible topics were suggested by the Executive Committee (scanning tunnel microscopy, fullerenes, quantum mechanics), and Prof. Zamaraev was asked to prepare a brief position paper for the 1992 meeting of the Bureau.

10/92 SPONSORSHIP OF SYMPOSIA

10.1/92 Ratification of IUPAC Sponsorship of Symposia

The sponsorships of symposia (Appendix I), approved through correspondence by the Secretary General on behalf of the President, since the 60th Bureau meeting, were ratified by the Executive Committee.

10.2/92 Ratification of Official Representatives to
IUPAC-sponsored Symposia

The appointments of official representatives of IUPAC to its sponsored symposia (Appendix J), as made on behalf of the President since the 60th Bureau meeting, were ratified by the Executive Committee.

10.3/92 International Conference on Effects of War on the
Environment

A completed Advanced Information Questionnaire, applying for IUPAC sponsorship of the Conference (Dubrovnik, Croatia: 93.04.13-17), was considered. Despite a recent modification in the title of the meeting, the Executive Committee was not convinced that the proposed Conference programme would confine itself solely to scientific issues. Therefore, it was decided, not to grant sponsorship.

11/92 REPORT ON IUPAC SECRETARIAT

The report of the Secretary General on his staff inspection at the Secretariat (92.01.22-23) had been precirculated. He was pleased to confirm that working conditions were satisfactory to all members. An up-to-date analysis of the staff time devoted to the various activities of the Union was being prepared. As a result of an Officers' decision, post-Hamburg, to initiate in 1991 the Secretariat computer facility development/networking envisaged in the draft 1992-3 budgets prior to Hamburg, but withdrawn at the General Assembly, a major effort was being made to set up a combined IUPAC Committee/Affiliate Membership database. The AES-system (non-IBM compatible) could then be phased out. The implications of the anticipated retirement, in the next five or so years, of three of the four senior members of staff was considered in some detail. The Executive Committee agreed that IUPAC retirement policy should be in line with national policy in UK.

12/92 DATES AND PLACE OF NEXT MEETING
[Minute 17(ii)/91, 116th Executive Committee]

Dr. Good confirmed her invitation for the Executive Committee to meet at Pleasantdale Farm, the training centre of Allied-Signal Inc., which was situated near to Newark international airport. The Executive Committee agreed on 17th-18th April 1993 as the dates for the meeting.

13/92 ANY OTHER BUSINESS

13.1/92 International Cooperation in Chemical Databases

Dr. Good suggested that the Union might wish to convene a workshop, possibly at Lisbon, of organizations like the US National Institute of Standards and Technology - from FRG, Japan, and other parts of the world - to consider the production of critically evaluated chemical data. She agreed to cochair such a workshop, possibly with Prof. E. Fluck (Gmelin-Institut), and to report to the 1992 meeting of the Bureau in more detail on how to proceed.

VOTES OF THANKS

Votes of thanks were recorded to the Royal Irish Academy/Trinity College for the provision of hospitality and facilities.

* * *

CHAIRMAN: Allen J. Band

DATE: 17 April 1993

INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY

Comparative Balance Sheet

as at 31st December 1990 & 1991

APPENDIX A

(as at 92.02.18: expressed in USD)

ASSETS	1990		1991	
Fixed Assets				
Fixed Assets/Depreciation		-	48 679 (g) (9 736) (h)	38 943
Cash in Banks				
USD	24 710		307 490	
GBP	20 069		(40 749)	
CHF	275		566	
DEM	52		78 130	
Money Market Investments	1 070 321		696 336	
Cash in East European Banks (a)	<u>8 703</u>	1 124 131	<u>9 084</u>	1 050 858
Marketable Securities at Cost		1 351 484		1 131 340
Accounts Receivable (b)		16 056		18 482
Sundry Debtor		37 424		38 194
Subscriptions, etc., Outstanding (c)				
National Organizations	106 700		86 022	
Observer Country Service Charges	50		50	
Company Associates Service Charges	<u>2 835</u>	109 585	<u>1 575</u>	87 647
Excess of Expenditure over Income		-		<u>161 602</u>
		<u>2 638 680</u>		<u>2 527 066</u>

LIABILITIES

1990

1991

Capital Account	2 301 394	2 335 692
Accounts Payable (d)	21 147	29 967
Paulo Franzosini Fund	5 659	5 659
Provisions		
Committed Expenditure	136 422	-
CTC-Teaching Environ. Chem.	970	1 200
CTC-INCE	-	500
Bad Debts	62 569	53 543
CHEMRAWN Rolling Fund	(3 390)	(8 037)
Neutra Examination	5 000	7 500
Solubility Data Series	988	1 649
Symposia, Seminars, IVPs	5 000	-
History of IUPAC	20 000	20 000
Purchases from Blackwells/Pergamon	2 653	4 621
IUPAC Handbook 1989-1991	16 050	-
Roy. Soc. Contbn. to Dev. Activs.	11 345	16 526
Kratos Grant (e)	5 586	586
Toxicology Glossary	5 940	-
ICSU Grants 1991	-	17 738
Lewis Publishers	-	2 000
Prepaid Subscriptions (f)	264 132	117 826
Sundry Creditor	12 050	50
Capital Gains Realized	-	17 050
Excess of Income over Expenditure	22 125	20 822
	<u>12 174</u>	<u>-</u>
	<u>2 638 680</u>	<u>2 527 066</u>

(a) Cash in East European Banks

Bulgaria	239
Czechoslovakia	5 194
Hungary	223
Poland	155
USSR	<u>2 892</u>

8 703

Revalued at 90.12.31 using relevant exchange rates for national currency to USD

(b) Accounts Receivable

List Oxford	16 056
-------------	--------

92 400

(c) Subscriptions, etc. Outstanding

National Organizations (1988)

Argentina	100
Iraq	<u>2 600</u>

2 700

National Organizations (1989)

Argentina	4 800
Cuba	700
Greece	1 400
Iraq	2 600
Ireland	1 400
Peru	<u>700</u>

11 600

National Organizations (1990)

Argentina	2 200
Austria	4 750
Brazil	2 000
Chile	1 600
Cuba	1 900
Czechoslovakia	6 600
Ethiopia	400
Greece	2 600
Iraq	3 800
Ireland	3 300
Japan	47 000
Netherlands	600
Nigeria	2 500
Peru	2 100
Portugal	3 200
Turkey	4 300
Yugoslavia	<u>3 550</u>

Service Charges
Company Associates (1989)

25

25

Service Charges
Company Associates (1990)

Japan	1 900
USA	<u>910</u>

2 810

Service Charges
Observer Countries (1990)

50

50

109 585

(d) Accounts Payable

List Oxford
List Zürich

18 443
2 704

21 147

(e) Commission V.2

(f) Prepaid 1991 subscriptions

NAO - China/Beijing	12 000
Observer Country - Romania	<u>50</u>

12 050

(a) Cash in East European Banks

Bulgaria	44
Czechoslovakia	3853
Hungary	415
Poland	663
USSR	<u>4109</u>

Service Charges
Company Associates (1991)
UK 630
USA 945

1 575

Revalued at 31.12.31 using relevant exchange rates for
national currency to USD

9 084

Service Charges
Observer Countries (1990)
Jamaica 50

50

87 647

(b) Accounts Receivable

(d) Accounts Payable

List Oxford

18 482

18 482

List Zürich
List Oxford (including
USD 10 000 provision
for capital expenditure
on computer network) 1 482
29 485

29 967

(c) Subscriptions, etc. Outstanding

National Organizations (1989)

(e) Commission V.2

Cuba

700

700

National Organizations (1990)

(f) Prepaid 1992 subscription
Observer Country - Mexico

50

Brazil	2 000
Chile	1 600
Cuba	1 900
Ethiopia	400
Japan	1 975
Peru	2 100
Yugoslavia	<u>3 550</u>

13 525

National Organizations (1991)

(h) Depreciation of Fixed Assets over five years

Argentina	2 100
Belgium	11 300
Bulgaria	5 100
Brazil	8 900
Chile	1 600
China/Beijing	1 900
Cuba	1 900
Ethiopia	400
India	11 300
Ireland	3 300
Japan	1 600
Nigeria	2 400
Peru	2 000
Turkey	4 200
UK	9 297
Yugoslavia	<u>4 500</u>

71 797

Comparative Statement of General Income & Expenditure
Years ended 31st December 1990 & 1991

EXPENDITURE	1990	1991
Office Expenses		
IUPAC Officers	8 475	12 218
IUPAC Secretariat (non-pubns.)	305 843 (a)	284 116
Depreciation of Fixed Assets	-	9 736*
Audit, Bank Fees, Other Charges	56 222	34 853
	370 541	340 924
Expenses IUPAC Bodies		
Administration Expenses	34 682	39 022
Meetings:		
Other than General Assembly	272 306 (b)	122 233
General Assembly	8 519	517 976
	315 507	679 231
Symposia, Seminars, IVPs (c)	5 000	2 500
Bad Debts Write Off	125	9 025
Provisions Made		
Symposia, Seminars, IVPs	5 000	-
Committed Expenditure	136 422	-
Bad Debts	-	-
IUPAC Handbook 1989-1991	16 050	-
Roy. Soc. Contbn. to Dev. Activs.	11 345	16 526
Neutra Provisions	5 000	7 500
Kratos Grant	586	586
Toxicology Glossary	5 940	-
ICSU Grants 1991	-	17 738
CTC-Teaching Environ. Chem.	-	1 200
CTC-INCE	-	500
Lewis Publishers	-	2 000
	180 343	46 050
Other Expenses		
ICSU Grants	7 276	8 362
UNESCO Contracts	1 000	-
Kratos Grant	-	-
Toxicology Glossary	2 719	5 940
EERO Grant	-	4 788 (e)
Contributions to ICSU	12 155	14 564
Representatives Other Organizations	19 366	11 674
IUPAC Handbook 1989-1991	-	15 625
Roy. Soc. Contbn. to Dev. Activs.	7 000	3 500
Transfer to Publications Subaccount	3 839	11 002
for Chem. Intl. for IUPAC Members		24 482
Transfer to Affiliates in		-
Developing Countries	9 449	2 011
Transfer to CHEMRAWN Subaccount	10 000	
Miscellaneous Expenses	2 467	
	75 271	101 949
Foreign Exchange Differences	-23 070	6 782
Excess of Income over Expenditure	12 174	-
	935 890	1 186 462

* see note (h) to 1991 balance sheet

INCOME

1990

1991

National Subscriptions Received Outstanding	442 765 92 400	535 165	438 074 71 797	509 871
Company Associates Service Charges Received Outstanding	5 230 2 810	8 040	5 265 1 575	6 840
Observer Countries Service Charges Received Outstanding	500 50	550	500 -	500
Interest and Dividends Earned (d)		172 920		184 301
Subvention/Grants from ICSU		27 706		26 100
Transfer from Publication Subaccount		140 715		88 210
Transfer from AMP Subaccount		10 607		-
Withdrawals from Provisions Symposia, Seminars, IVPs Committed Expenditure Bad Debts IUPAC Handbook Roy. Soc. Contbn. to Dev. Activs. Toxicology Glossary Kratos Grant Neutra Provision CTC	107 4 316 125 1 050 2 000 1 434 - 4 000 -		5 000 136 422 9 025 16 050 11 345 5 940 586 5 000 700	190 068
Other Income Kratos Grant Toxicology Glossary Pergamon Travel Grant EERO Grant & Lewis Publishers CTC-INCE Contbn. Roy. Soc. Contbn. to Dev. Activs.	586 7 224 3 000 - - 16 345		- - 3 000 6 788 500 8 682	18 970
Excess of Expenditure over Income				161 602
		935 830		1 186 462

Notes for 1990 Statement of Income and Expenditure

- (a) Includes USD 56 256.97 for major refurbishment of Secretariat and USD 7 561.13 for purchase of additional computer equipment (total of USD 63 818.10) not included in 1990 budget and taken from assets
- (b) Includes USD 42 970.48 not included in 1990 budget and taken from assets
- (c) IVPs = IUPAC Visiting Professorships
- (d) USD 481 interest on capital of Paulo Franzosini Fund already deducted

Notes for 1991 Statement of Income and Expenditure/Subaccounts

- (e) EERO = European Environmental Research Organization

Comparative Statement of Publication Income & Expenditure
Years ended 31st December 1990 & 1991

<u>EXPENDITURE</u>	<u>1990</u>	<u>1991</u>
IUPAC Secretariat (publications)	163 355	194 247
Blackwell Purchases/Chem. Intl. for IUPAC Members	3 839	11 002
Solubility Data Series		
Expended	433	839
Provision Made	988	1 649
	1 421	2 488
Chemical Databases	2 686	23 609
Miscellaneous Expenditure	17 216	20 949
Transfer to General Income & Expenditure Account	140 715	88 210
	<u>329 232</u>	<u>340 506</u>

<u>INCOME</u>		<u>1990</u>	<u>1991</u>
Publications			
Blackwell	284 415	286 335	
Pergamon	10 173	15 166	
Other Publishers	12 410	11 707	
Secretariat	<u>366</u>	<u>306</u>	313 515
Support of Publication Activities by Blackwell		13 500	13 500
Transfer for Blackwell Purchases/ Chem. Intl. for IUPAC Members		3 839	11 002
Solubility Data Series			
Last Year's Provision Income	<u>1 421</u>	1 421	2 488
Last Year Provision for Publication Activities		3 109	-
Miscellaneous Income		<u>329 232</u>	<u>340 506</u>

Comparative Statement of Affiliate Membership Programme Income & Expenditure
Years ended 31st December 1990 & 1991

<u>EXPENDITURE</u>	<u>1990</u>	<u>1991</u>
IUPAC Secretariat (AMP)	39 776	40 028
Chem. Intl. & Leaflets	54 538	51 690
Miscellaneous Expenses	4 713	9 527
Transfer to General Income & Expenditure Account	<u>10 607</u>	<u>-</u>
	<u>109 634</u>	<u>101 245</u>

<u>INCOME</u>	<u>1990</u>	<u>1991</u>
Contributions		
In USD	71 676	66 492
Cash in East European Banks	6 504	2 940
Royalties Blackwells	2 750	6 514
Income Ties & Scarves (a)	511	816
Transfer from General Income & Expenditure Account for Affiliates in Developing Countries	9 449 (a)	24 482
Transfer from Provision for Affiliate Activities	<u>18 744</u>	<u>-</u>
	<u>109 634</u>	<u>101 245</u>

(a) IUPAC subsidy for Affiliates in Developing Countries

Comparative Statement of CHEMRAWN Income & Expenditure
Years ended 31st December 1990 & 1991 (a)

<u>EXPENDITURE</u>	<u>1990</u>	<u>1991</u>
CHEMRAWN Committee Expenses	15 219	4 647
CHEMRAWN VII Seed Money	-	
Transfer to CHEMRAWN Rolling Fund	-3 390	- 8 037
	<u>11 829</u>	<u>-3 390</u>
<u>INCOME</u>	<u>1990</u>	<u>1991</u>
Transfer from General Income and Expenditure Account	10 000	-
Transfer from Provision for CHEMRAWN Rolling Fund	<u>1 829</u>	<u>- 3 390</u>
	<u>11 829</u>	<u>- 3 390</u>

(a) CHEMRAWN = CHEMical Research Applied to World Needs

IUPAC DATABASE PROCEDURES GUIDELINES

1. In order to start a database project a Project Initiation Proposal Form (available from the IUPAC Secretariat) must be completed by an IUPAC body, endorsed if necessary by the relevant Division/Section President, and then sent to the IUPAC Secretariat with a copy to the Chairman of CCDB.
2. The Project Initiation Proposal Form must include the name(s) of the Coordinator for the database project.
3. Data content and data quality is the responsibility of the IUPAC body in charge of the project.
4. The Coordinator is responsible for ensuring that all copyright and ownership issues are defined and resolved, so that IUPAC can disseminate the database project results. Legal questions should be addressed to the Secretary General at the IUPAC Secretariat.

The completed Project Initiation Proposal Form should contain:

- (a) a short description of the database and software;
 - (b) a short statement regarding any similar or related databases and software in this field;
 - (c) a short description of how the work will be undertaken, including a timetable for its completion;
 - (d) a request for any financial support needed from IUPAC (hardware, software, data entry funding, etc.)
-
5. dBase is the IUPAC recommended software data entry and data search software. At the September 1990 meeting of the IUPAC Bureau dBase was approved as the recommended retrieval software for IUPAC computerization projects, and ASCII was recommended as the standard format for the data. The dBase software, together with the related Clipper software for compiling dBase code, will be provided at no cost to any approved IUPAC database project, which requires these software products.

6. CCDB will review and recommend to the IUPAC Bureau that a database project should definitely be started. It will also request funding from IUPAC, as necessary, via the Treasurer for the work to be started.
7. The responsibility for testing the computer system resides with the IUPAC body which has initiated the project. Additional testing will be undertaken by CCDB prior to any release of the computer system.
8. When the project is within a few months of being ready for public dissemination, CCDB will initiate the necessary contractual activities to distribute the database and software project.
9. The Coordinator is responsible for the writing of the computer system manual, the updates and corrections of the database and software, and answering any technical questions from users.
10. When the Coordinator is no longer involved in the project, the relevant IUPAC body will either withdraw the computer system from distribution by writing to CCDB or name a new Coordinator to continue the project.

GUIDELINES FOR SUBCOMMITTEES*

1. A subcommittee should be set up only with the approval of the relevant Division/Section Committee (Statute 10.6), on the basis of precise objectives, and within the approved terms of reference of that Committee or the relevant Commission.
2. The existence of each subcommittee should be reviewed at every General Assembly by the relevant Division/Section Committee, and the decision on continuation (or not) should be reported to the Bureau.
3. A subcommittee should preferably be chaired by (or have oversight from) a present or recent-past active Titular Member of the relevant Commission or Division/Section Committee. The address of that liaison or contact person should be included in the *Handbook*.
4. Division/Section Presidents and Commission Chairmen are requested strictly to discontinue all inactive members of subcommittees.
5. A subcommittee must be funded within the approved Division/Section budget [see also guidelines on the right to receive expenses: Minute 4.1(ii)/92].
6. The twelve-years maximum service rule for IUPAC bodies should be applied by Division/Section Presidents and Commission Chairmen to members of subcommittees.

* Subcommittees include subcommissions, steering committees, working parties, working groups, task groups, and subgroups.

DISCUSSION PAPER ON RESTRUCTURING OF IUPAC

(for Meetings of Division/Section Presidents and Bureau:
Oxford, UK, 11th-13th September 1992)

During its meeting in Dublin in May, the Executive Committee (EC) discussed the comments received on the letter of 8th January 1992 - circulated by the Secretary General on behalf of the Officers - on restructuring. It decided to table this item again at the September meeting of the Bureau in Oxford. The meeting of Division/Section Presidents preceding the Bureau meeting will probably discuss this item as well. The present document will serve as the basis for these discussions.

Although the response to the letter of 8th January was disappointing from a quantitative point of view - a number of Divisions did not reply at all - many valuable comments were made, which helped the EC in its deliberations. Following the same format as in the previous circular letter, three main items are now again considered.

1. PROGRAMMES/PROJECTS

There appears to be quite general agreement, that the scientific programme of the Union should consist of high-priority projects within the Guidelines for IUPAC Programmes (p. 111 of IUPAC Handbook 1991-1993), and that external reviewing will be beneficial. All respondents have agreed to be cooperative in this respect. Some note that this policy has already been applied in the past.

Therefore, the EC proposes to try to come in September at the Bureau meeting to a final agreement in the way of operation.

In addition, the Union's financial forecast, in which expenditure is projected to run ahead of income, makes it vital that IUPAC concentrates its efforts on high-priority projects.

1.1 New Projects

Preparation of new projects, which are to be initiated at a General Assembly (GA), should start in the even year preceding the GA. Commissions should make a preliminary definition of each project, so that it can be subject to external refereeing under the responsibility of the Division/Section during the summer of the even year. After receiving the opinion of outside experts, a further exchange of views could occur by correspondence between Divisions/Section and Commissions and within Commissions.

At the GA the projects to be initiated should be subject to a final discussion, for example, according to the following timetable:

- at the start of the GA, final input by Division/Section Committee into the projects at a meeting with Commission Officers
- final discussion within Commissions, resulting in preparation of Project Initiation Forms (PIFs)
- at the end of the GA, final approval given by Division/Section Committee. PIFs in typed form submitted to IUPAC Secretariat

In September all PIFs should be sent to the Union's Vice-President for his biennial Critical Assessment. Also, PIFs should constitute the input into the new Handbook.

It should even remain possible to introduce top-priority projects at the actual GA and even between GAs, the system thereby remaining flexible.

1.2 Future Projects

A similar cycle could apply to future projects to be introduced at a later GA. In the comments received it has been stated that it would not be realistic to plan more than one GA ahead. However, a short note on future projects could be prepared by Divisions/Section at the end of a GA to the Secretariat, and also for submission to the Union's Vice-President.

1.3 On-going Projects

Until now Divisions/Section and Commissions have been asked to prepare Revision Sheets (RSs) for each on-going project. As time went on the number of on-going projects has grown considerably, resulting in a very large amount of RSs, which has caused the Commissions, the Secretariat, and the Vice-President much work. Moreover, these RSs were often prepared in a great hurry at the end of a GA, and consequently they do not produce the information wanted. The EC has concluded that this procedure should be simplified. The proposal is that at the end of the Commission meetings at a GA, each Commission should prepare a short type-written report - of all its on-going projects on one sheet of A4 paper per Commission - mentioning the progress made and the envisaged dates of completion.

The EC feels that this would serve a better purpose, and save a lot of administration for Commissions and the Secretariat. It is a matter of fact that, at present, not all on-going projects belong to the category of high-priority projects. Some may also not fit within the Guidelines. Nevertheless, these projects should be completed, as otherwise considerable effort would be lost.

1.4 Vice-Presidential Critical Assessment

The biennial Vice-Presidential Assessment will be carried out during the period December after GA - October of the next even year. It will be based on:

- PIFs for new projects
- reports on on-going projects by each Commission (one sheet of A4 paper per Commission)
- future projects
- input by Divisions/Section prior to the even year Bureau meeting and at the interviews by the Union's Vice-President of the Division/Section Presidents at that Bureau meeting
- Division/Section policy with respect to optimization of Commission structure and membership (see sections 2 and 3 of this document)

In order to obtain as much input as possible from even-year Commission meetings, the EC proposes to have the even-year Bureau meeting not earlier than late September.

1.5 Terms of Reference

From information obtained from Divisions/Section, it appears that some Commissions have made changes in the fields in which they operate, resulting in the fact that the scientific programme no longer conforms with their approved terms of reference (see IUPAC Handbook 1991-1993). Moreover, it is likely that restructuring might lead to other objectives.

Divisions/Section and Commissions are asked to carefully look at their terms of reference, and to redefine them where necessary. It should be emphasized, however, that changes in terms of reference must be approved by Council.

1.6 Mission-oriented (horizontal) Programmes

It is the intention of the EC to integrate these programmes as much as possible into the Division/Section projects. It has already been decided that the Chemistry and Environmental Programme (CEP), which is coordinated by Prof. V. A. Koptug, should be on the agenda of the meeting of Division/Section Presidents next September. A similar policy is envisaged for the Chemistry and Advanced Materials Programme (CAMP).

The mission-oriented programmes are appreciated by the Division/Section and Commission Officers very differently. Some expect a synergistic effect from such projects, others consider them as unsuitable for the Union.

2. COMMISSION STRUCTURE

Whereas a rather general agreement could be observed on the restructuring of the scientific programme, little support was noticed in the comments to much change in the present Commission structure. A major point seems to be, that most Divisions wish to cover with their Commissions the whole field of their discipline. It has been emphasized that the Commission structure has to be considered as the guarantee for the continuity of the scientific activities within the Union. However, a willingness can be observed to consider adjustments, which might result from the new policy with respect to the scientific programmes outlined in section 1 of this document. The developments within the field of some Commissions will be quicker than in others, which will result in different numbers of high-priority areas. This should result in different numbers of members for Commissions. Such decisions on the size of Commissions require a strong leadership by Division/Section Committees, especially by the Division/Section Officers.

Another important point mentioned in the comments received is that the present 10-12 years rules for membership could be one of the causes of the so-called static character of the programmes of Commissions. One comment states that the time of service of Commission members should not necessarily be the same for all, e.g., long time core-members; short time specific project specialists. The automatic reappointment for another four-years term should therefore be very critically considered. This requires again strong leadership by Commission Officers. It generally seems difficult not automatically to reappoint good Commission members (the same can be observed with recommendations for election of Bureau members: it is all very human!).

The EC proposes to have a thorough discussion of these problems at the Bureau meeting. It wishes to include the following points in this discussion:

- LLTCs have been created in Lund (1989) for a four-years period; they will cease to exist in Lisbon (1993). If necessary, a case will have to be made to continue their existence as a normal Commission. However, in this situation the abolition of another Commission should

be considered. Moreover, the overall situation should at least be a zero sum situation with respect to the total number of TMs of a Division.

- One Division has announced a wish to create a new Commission. The same requirements will apply as mentioned in the previous point. Moreover, a careful wording of the terms of reference should be submitted, in order to enable Council to decide on the necessity to create such a Commission.
- During his Vice-Presidency, President Bard made an attempt to reduce the number of Commissions by amalgamating the two Electrochemical Commissions as well as the two Spectrochemical Commissions (I.3-V.5 and I.5-V.4, respectively). That attempt failed. He now proposes that the two relevant Division Presidents should consider the following modification: the TM-ship of these four Commissions is reduced to four for each, and both sets of Commissions should meet jointly.

3. MEMBERSHIP

Although in general everybody agrees to invite the best experts to run a project, it has been mentioned that the best experts have not always appeared to be the most active Commission members. Nevertheless, there is agreement that the best available experts should be asked to run the projects selected. As the projects discussion in the proposed mechanism starts well ahead of the GA, it should be possible to adjust the membership at the GA accordingly.

4. FINAL REMARKS

A couple of times the necessity of maintaining a good and friendly relationship between all levels of the Union (Bureau-Divisions/Section-Commissions) has been emphasized. Therefore, we will continue to discuss the matter of restructuring as broadly as possible. It should always be kept in mind, that so much effort is made by Commissions with little financial support.

APPENDIX E

RATIFICATION OF MEMBERSHIPS APPROVED BY CORRESPONDENCE

I. STANDING COMMITTEES

CHEMRAWN Committee

Dr. D. A. Bekoe (Kenya)	- Associate Membership extended (1988-1995)
Prof. E. J. Grzywa (Poland)	- Membership extended (1988-1995)
Prof. F. A. Kuznetsov (USSR)	- Associate Membership extended (1988-1995)
Mr. S. Morita (Japan)	- Associate Member (1992-1995)
Prof. C. Ponnampereuma (USA)	- Associate Membership extended (1988-1995)
Prof. Sir John Meurig Thomas (UK)	- Membership extended (1987-1995)
Dr. S. Varadarajan (India)	- Membership extended (1988-1995)

Committee on Affiliate Membership

Prof. H. A. Staab (FRG)	- Chairman (1992-1993)
Prof. G. den Boef (Netherlands)	- Member (1991-1995)
Prof. W. Heitz (FRG)	- Member (1991-1993)

Committee on Chemistry and Industry

Prof. P. De Bièvre (Belgium)	- Membership extended (1988-1995)
Mr. E.W. Callahan (USA)	- Member (1992-1995)
Mr. T. D. Culpin (UK)	- Member (1992-1995)
Dr. M. Kavala (Czechoslovakia)	- Membership extended (1988-1995)
Prof. N.-G. Vannerberg (Sweden)	- Membership extended (1987-1995)

Committee on Teaching of Chemistry

Membership vacancy arising from completion of service of Prof. J. T. Shimozawa (1983-1991) not to be filled, due to present financial difficulties of IUPAC

Interdivisional Committee on Nomenclature and Symbols

Dr. A. D. McNaught (UK)	- Reappointed Secretary (1992-1995)
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IUBMB-IUPAC Joint Commission on Biochemical Nomenclature

Mr. J. C. Rigg (Netherlands) - Associate Membership extended
(1988-1995)

II. COMMISSIONS

Commission on High Temperature and Solid State Chemistry

Dr. M. Thackeray (South Africa) - Associate Member (1991-1995)

Commission on Polymer Characterization and Properties

Mr. J. M. Cann (UK) - Chairman (1991-1993)
Dr. J. Stejskal (Czechoslovakia) - Secretary and Titular Member
(1991-1995)

Commission on Electroanalytical Chemistry

Prof. R. P. Buck (USA) - Chairman (1991-1993)
Dr. Klára Tóth (Hungary) - Secretary (1991-1995)

Commission on Biotechnology

Dr. J. L. Fox (USA) - Chairman (1991-1993)

Commission on Atmospheric Chemistry

Dr. L. Barrie (Canada) - Titular Member (1991-1995)
Prof. E. H. Adema (Netherlands) - Associate Member (1991-1995)
Dr. S. E. Schwartz (USA) - Associate Member (1991-1995)

Commission on Toxicology

Dr. Jytte Molin Christensen - Titular Member (1991-1995)
(Denmark)

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Medicinal Chemistry Section

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Applied Chemistry Division
Prof. H. P. Lehmann (1991-1995)
Clinical Chemistry Division
Prof. C. G. Wermuth (1989-1993)
Medicinal Chemistry Section

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CENTURY - EDITORIAL ADVISORY BOARD
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- Prof. H. Heikkinen (1991-1993)
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Dr. P. S. Steyn (1990-1993)
Applied Chemistry Division
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Medicinal Chemistry Section

COMMITTEE ON STUDENT-ORIENTED
NOMENCLATURE BOOK
(Established in its present form 1991)

Members

- Prof. C. J. H. Schutte (1991-1995)
Chairman
- Prof. J. D. Bradley (1991-1995)
Prof. T. Cvitaš (1991-1995)
Prof. H. A. Favre (1991-1995)
Dr. S. Gfäb (1991-1995)
Prof. G. J. Leigh (1991-1995)

COMMITTEE ON TEACHING OF CHEMISTRY
(CTC)

(Established 1963)

Divisional/Sectional Members

- Dr. K. N. Marsh (1989-1993)
Physical Chemistry Division
Prof. L. Kihlberg (1989-1993)
Inorganic Chemistry Division
Prof. M. Ōki (1989-1993)
Organic Chemistry Division
Dr. P. Čefelín (1989-1993)
Macromolecular Division
Prof. J. Jordan (1989-1993)
Analytical Chemistry Division
Prof. N. M. Bazhin (1989-1993)
Applied Chemistry Division
Dr. H. G. J. Worth (1989-1993)
Clinical Chemistry Division
Prof. C. R. Ganellin (1989-1993)
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 (1989-1993)
Physical Chemistry Division
Prof. J. Reedijk (1985-1993)
Inorganic Chemistry Division
Prof. J. C. Richer (1989-1993)
Organic Chemistry Division
Dr. P. Kratochvíl (1985-1993)
Macromolecular Division
Prof. A. Townshend (1991-1995)
Analytical Chemistry Division
Mr. J. A. Tetlow (1989-1993)
Applied Chemistry Division
Mr. J. C. Rigg (1989-1993)
Clinical Chemistry Division
Prof. C. R. Ganellin (1991-1995)
Medicinal Chemistry Section

Associate Members

Prof. T. Cvitaš (1991-1995)
Physical Chemistry Division
Prof. J. Corish (1985-1993)
Inorganic Chemistry Division
Prof. M. M. Mikołajczyk (1991-1995)
Organic Chemistry Division
Dr. R. E. Bareiss (1985-1993)
Macromolecular Division
Dr. C. L. Graham (1991-1995)
Analytical Chemistry Division
Dr. R. Greenhalgh (1985-1993)
Applied Chemistry Division
Mr. M. Lauritzen (1989-1993)
Clinical Chemistry Division
(appointment will be made)
Medicinal Chemistry Section

ADDITIONS/CHANGES TO TERMS OF REFERENCE OF IUPAC BODIES

Commission on Atomic Weights and Isotopic Abundances

Add:

5. Review of natural isotope fractionation of selected elements.

Commission on Isotope Specific Measurements as References (LLTC)

Change to:

1. To organize International Measurement Evaluation Programmes (IMEPs) by distributing samples for trace element analysis, which have "definitive" values determined by isotope-specific measurements.
2. To compare various measurement techniques by publishing "state-of-the-practice" measurement results graphically, with "definitive values" displayed for comparison purposes.
3. To investigate the possible role of IUPAC in the interpretation of regulatory concentration levels for elements.

Commission on Polymer Characterization and Properties

Change to:

Through collaborative study, to obtain data and understanding on the relationships between molecular structure, rheology, production processes, morphology, properties and performance of polymeric materials, in order to promote their wider and more effective use.

Commission on Radiochemistry and Nuclear Techniques

Change to:

The working programme consists of:

- Speciation of trace elements in the environment by radioanalytical techniques
- Critical evaluation of nuclear data: half-lives, cross sections
- Nomenclature for isotope, nuclear and radioanalytical chemistry
- Applications of radioanalytical methods in chemistry, biology, and medicine

Commission on Atmospheric Chemistry

Change to:

To identify problems related to the chemistry of the atmosphere and to advise and cooperate in international activities designed to address these problems. The coverage includes indoor/ workplace air quality, urban and regional environments, as well as the global atmosphere. Among other considerations, it will be necessary to review and harmonize the sampling and analytical procedures for studying atmospheric chemistry.

APPENDIX H

STANDING ORDERS FROM EXECUTIVE COMMITTEE FOR MONOGRAPHS ON CHEMISTRY FOR 21st CENTURY EDITORIAL ADVISORY BOARD

Composition and Terms of Office

- (i) There shall be an Editorial Advisory Board for the IUPAC *Monographs on Chemistry for the 21st Century*, composed of a Chairman, a Secretary, one representative from each of the Divisions/Sections and from the CHEMRAWN Committee, Committee on Chemistry and Industry, and Committee on Teaching of Chemistry.
- (ii) The Monographs-EAB shall have a limited lifetime, and its effectiveness shall be reviewed at the 37th General Assembly in 1993.
- (iii) The representatives shall be nominated by the President or the Chairman of the relevant IUPAC bodies, and be appointed by the President of the Union in consultation with the Executive Committee.
- (iv) The President in consultation with the Executive Committee shall appoint the Chairman and the Secretary.

Terms of Reference

On behalf of the Committee on Publications:

- (i) to review the editorial policy at a General Assembly,
- (ii) to review the progress of the previously agreed monographs, and the effectiveness of the published ones,
- (iii) to advise the Chairman regarding subjects and prospective editors/authors for future monographs.

SPONSORSHIPS OF SYMPOSIA BY IUPAC APPROVED BY CORRESPONDENCE

SINCE 60TH BUREAU MEETING

16th International Carbohydrate Symposium
Paris, France: 5th-10th July 1992

International Conference on Chemistry, Agriculture and the Environment
Guildford/Surrey, UK: 17th-19th July 1992

11th International Conference on Physical Organic Chemistry
Ithaca/New York, USA: 2nd-7th August 1992

4th International Seminar on Flame Structure
Novosibirsk, USSR: 18th-22nd August 1992

13th International Conference on Raman Spectroscopy
Würzburg, FRG: 31st August-4th September 1992

5th International Conference on Nickel Metabolism and Toxicology
Sudbury/Ontario, Canada: 7th-11th September 1992

9th European Symposium on Structure-Activity Relationships: QSAR and Molecular
Modelling
Strasbourg, France: 7th-11th September 1992

12th International Symposium on Medicinal Chemistry
Basel, Switzerland: 13th-17th September 1992

International Symposium on Experimental and Theoretical Aspects of Excited State
Electron Transfer and Related Phenomena
Pultusk/Warsaw, Poland: 26th September-1st October 1992

12th International Conference on Chemical Education
Bangkok, Thailand: 17th-21st December 1992

International Conference on Thermodynamics of Solutions and Biological Systems
New Delhi, India: 3rd-5th January 1993

10th International Symposium on Carotenoids
Trondheim, Norway: 20th-25th June 1993

11th International Symposium on Cationic Polymerization and Related Ionic
Processes
Borovets, Bulgaria: 5th-8th July 1993

33rd Microsymposium on Macromolecules: Optics and Dynamics of Polymers
Prague, Czechoslovakia: 12th-15th July 1993

34th Microsymposium on Macromolecules: Fluorinated Monomers and Polymers
Prague, Czechoslovakia: 19th-22nd July 1993

5th International Symposium on Macromolecule-Metal Complexes
Bremen, FRG: 30th August-3rd September 1993

International Conference on Advanced Polymer Materials
Dresden, FRG: 6th-10th September 1993

19th International Symposium on Chemistry of Natural Products
Karachi, Pakistan: 16th-20th January 1994

35th IUPAC International Symposium on Macromolecules
Akron, Ohio, USA: 11th-15th July 1994

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

12th International Conference on Physical Organic Chemistry
Padova, Italy: September 1994

OFFICIAL REPRESENTATIVES TO IUPAC-SPONSORED SYMPOSIA

APPROVED BY CORRESPONDENCE

SINCE 60TH BUREAU MEETING

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

Prof. K. V. SANÉ

Centenary of Geneva Conference - Organic Chemistry: Its Language and its State of
the Art
Geneva, Switzerland: 22nd-24th April 1992

Prof. H. ZOLLINGER

5th Symposium on Biological and Environmental Reference Materials
Aachen, FRG: 11th-14th May 1992

Prof. P. DE BIEVRE

Conference on Calorimetry and Thermodynamics of Biological Processes
Gullmarsstrand, Sweden: 15th-19th May 1992

Prof. I. WADSÖ

3rd Conference on Heteroatom Chemistry
Riccione, Italy: 7th-12th June 1992

Prof. G. SCORRANO

14th Liquid Crystal Conference
Pisa, Italy: 21st-26th June 1992

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9th Conference on Organic Synthesis
Montreal, Canada: 28th June-2nd July 1992

Prof. IRINA P. BELETSKAYA

2nd Symposium on Surface Chemistry, Adsorption and Chromatography
Moscow, USSR: 29th June-3rd July 1992

Prof. J. ROUQÉROL

16th Carbohydrate Symposium
Paris, France: 5th-10th July 1992

Prof. Y. P. JEANNIN

Symposium on Ring Opening Polymerization
Warsaw, Poland: 7th-12th July 1992

Prof. P. SIGWALT

10th Conference on Computers in Chemical Research and Education
Jerusalem, Israel: 12th-17th July 1991

Dr. C. JOCHUM

Symposium on Risk Management of Chemicals
Guildford, UK: 13th-16th July 1992

Dr. ANGELA DANIL DE NAMOR

34th Symposium on Macromolecules
Prague, Czechoslovakia: 13th-18th July 1992

Prof. W. HEITZ

Conference on Chemistry, Agriculture and the Environment
Guildford, UK: 16th-18th July 1992

Dr. T. R. ROBERTS

7th Symposium on Novel Aromatic Compounds
Victoria/BC, Canada: 19th-24th July 1992

Prof. H. A. STAAB

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

Prof. Y. P. JEANNIN

14th Symposium on Photochemistry
Leuven, Belgium: 19th-25th July 1992

Dr. D. R. EATON

11th Conference on Physical Organic Chemistry
Ithaca/New York, USA : 2nd-7th August 1992

Prof. W. DRENTH

3rd Symposium on Analytical Chemistry in Exploration, Mining and Processing of
Materials
Randburg/Transvaal, South Africa: 3rd-7th August 1992

Dr. Y. THOMASSEN

17th Symposium on Macrocyclic Chemistry
Provo/Utah, USA: 9th-14th August 1992

Prof. H. A. STAAB

12th Conference on Chemical Thermodynamics
Snowbird/Utah, USA: 16th-21st August 1992

Prof. R. A. ALBERTY

4th Seminar on Flame Structure
Novosibirsk, USSR: 18th-22nd August 1992

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18th Symposium on Chemistry of Natural Products
Strasbourg, France: 30th August- 4th September 1992

Prof. S. ITO

CHEMRAWN VIII : Chemical Aspects of Environmental Problems of Industry and Reuse
of Wastes as Raw Materials
Moscow, USSR: 6th-9th September 1992

Dr. A. HAYES

12th Symposium on Medicinal Chemistry
Basel, Switzerland: 13th-17th September 1992

Prof. J. G. TOPLISS

Symposium on Macrocyclic Ligands for Design of New Materials
Guildford, UK: 14th-16th September 1992

Prof. J. W. LORIMER

Experimental and Theoretical Aspects of Excited State Electron Transfer and
Related Phenomena
Pultusk, Poland: 27th September-2nd October 1992

Prof. J. W. VERHOEVEN