

INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY

MINUTES OF 114th MEETING OF EXECUTIVE COMMITTEE

Association of Greek Chemists, Athens: 28th-29th April 1990

Present: Prof. Y.P. Jeannin (Chairman), Prof. A.J. Bard, Prof. A. Björkman, Prof. S. Itô, Prof. V.A. Koptug, Prof. N. Sheppard, Prof. T.S. West

Absent: Dr. Mary L. Good

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

1/90 INTRODUCTORY REMARKS AND FINALIZATION OF AGENDA

The President said that Dr. Good was unable to be present due to another commitment. The following items were added to the agenda circulated by the Executive Secretary (90.04.20):

- 4.4.1 ENTVAPOR Database
- 9.4 History of IUPAC

Also, at the request of the Treasurer, it was agreed to consider item 4.2 on the second day.

Prof. Björkman expressed concern at the poor participation at the 112th Executive Committee meeting, especially on the second day, and at the absence of Dr. Good at Athens. He wondered if a more convenient location could be used in future to ensure a better attendance.

2/90 MINUTES OF 112th AND 113th MEETINGS OF EXECUTIVE COMMITTEE

2.1/90 Amendments and Approval of Minutes

The Minutes of the meetings at Lisbon (circulated by the Executive Secretary 89.07.19) and Lund (tabled at Athens) were approved, subject to extending the wording under (i) and (ii) of Minute 14/89 as follows:

- "(i) the restructured Finance Committee should consist of a Chairman and three-four Members, depending on various consultations to be made by the President;
- (ii) the Chairman should be Prof. J.M. Ward (UK), and Dr. L.C. Krogh (USA) should be one of the Members - the advantages of having Dr. J. Brunner (Switzerland) as a Member were discussed;"

The Treasurer suggested that, in advance of future General Assemblies, all candidates for election as Officers of the Union/Elected Members of the Bureau should be advised about the possible need to attend the meetings of the new Bureau/Executive Committee after the Council finished its deliberations.

2.2/90 Matter Arising from Minutes

2.2.1/90 IUPAC Component of Affiliate Subscription for 1989  
(Minute 2.1.2.1/89, 112th Executive Committee - last paragraph)

The President suggested that the Affiliate Affairs Secretary, in conjunction with the Executive Secretary, should evaluate if USD 12.00 for the IUPAC component of the Affiliate subscription were sufficient to cover the costs involved. The Secretary General emphasized that a decision on the IUPAC component for 1992-3 must be taken not later than at the 1991 Spring meeting of the Executive Committee, and preferably at the the Bureau in Milan.

3/90 MINUTES OF 57th AND 58th MEETINGS OF BUREAU/35th COUNCIL AND MATTERS ARISING

Due to a continuing excessive workload since Lund, the Executive Secretary regretted that he had been unable to draft any of these minutes. Indeed, he had been unable to take all of his contractual leave in 1989, some of which had been forfeited. Also, the situation had been aggravated by working conditions in the Secretariat, while the adjacent shopping centre was being refurbished. The Secretary General elaborated on the situation, and he drew attention to the ever increasing workload for the Secretariat without any discontinuation of its existing duties.

In general, the Executive Committee agreed that full minutes should be available not later than two months after each meeting. The Treasurer's suggestion of preparing an interim checklist of decisions taken/actions agreed was noted. However, the Executive Committee confirmed that full minutes must remain the first priority.

3.1/90 Proposed IUPAC-UNESCO Initiative in Latin America  
(Draft Minute 2.2.1/89, 57th Bureau)

(i) Following the decision to participate in the Directive Council (Minute 3.2.1/88, 56th Bureau - Oxford), President Jeannin had nominated Profs. A.J. Arvia and I. Wadsö for the two IUPAC positions on the Council. Regarding the four Latin-American members, he had accepted the nominations of Prof. G. Cilento (Brazil), Prof. M. Silva (Chile), and Dr. E.J. Vasini (Argentina).

The Executive Committee ratified the appointments made by the President, and approved Ing. D.U Mont (Peru) as the fourth Latin-American member. Furthermore, noting a report from Prof. Wadsö (90.04.18), the Executive Committee asked Prof. Jeannin to try and arrange a personal meeting with the Director General of UNESCO. If the outcome was not positive, then IUPAC should consider withdrawing from the joint Initiative. However, if the outcome was positive, the UNESCO office in Montevideo might act as the secretariat for the Initiative. Nevertheless, the Secretary General felt that control must remain in IUPAC.

(ii) It was decided to refer an application for sponsorship by IUPAC of a proposed Latin-American Chemical Information Network for the attention of the Directive Council under (i) above. Prof. Jeannin would ask Dr. S.R. Heller (CCDB) about the extent of the proposed Network.

(iii) Regarding the IUPAC Seminars/Visiting Professorships (IVPs) programme, the Executive Secretary reported that, unfortunately ICSU had still not confirmed a main sponsor for the the IUPAC application for USD 25 000 from the UNESCO Participation Fund. The Secretary General drew attention to the extra potential work burden for the IUPAC Secretariat should the funding eventually be allocated.

3.2/90      Re-evaluation of Presidential Rulings  
(Draft Minute 3.4/89, 57th Bureau)

The Secretary General referred to his previous evaluation of the need for statutory changes (Minute 2.2.6/89, 112th Executive Committee) and the subsequent suggestions of the Executive Secretary (89.06.23). The Executive Committee agreed to recommend to the Bureau at Milan:

(i) To delete from the second sentence of the first paragraph of Bylaw 2.222

"but for which in exceptional circumstances the restriction in Statute 7.2 of no Adhering Organization having more than one Elected Member on the Bureau shall not apply"

and to amend the sixth sentence of Statute 7.2 to start with

"Unless exceptional circumstances are established and special permission of the Council granted, no Adhering Organization ... into account."

(ii) To add the following sentence to Statute 4.2

"No person shall hold more than three appointments to bodies of the Union, except at the discretion of the Bureau in respect of membership of a subcommittee or acting as an official representative within or outside the Union."

(iii) To insert at the end of the Statutes and Bylaws in the IUPAC Handbook

"PRESIDENTIAL RULING

Member Countries/Territorial Considerations: see Minute 10/79, 30th Council - Davos"

(iv) To reword Statute 9.2

"Any Adhering Organization in arrears with its subscription for a period of twelve months after 31 December of the year during which the subscription was payable, shall be warned, shall be deprived of its voting rights, and all publications of the Union shall be withheld from it. Any Adhering Organization in arrears for a period of thirty-six months from the due date shall automatically cease to be a Member of the Union. Partial payment of the subscription shall be regarded as nonpayment, unless the Union exceptionally waives the outstanding subscription. Membership of bodies of the Union of all persons belonging to an Adhering Organization, which ceases to be a Member, shall continue at the discretion of the Bureau to the end of the period of service."

(v) To delete from the third sentence of the first paragraph of Bylaw 4.304

"in the same category"

to amend the fourth sentence to read

"... consecutive or not, and further appointment thereafter as an Associate Member shall be for two years only. The rotation of a person through alternate periods of Associate, Titular, and Associate Membership may be permitted to a total of twelve years. Exceptional circumstances ..."

and to amend (iii) to read

"... National Representative, of one or more Commissions of a Division or Section or ..."

(vi) To add to Bylaw 4.307

"Under exceptional circumstances contributions may be made to Associate Members or members of subcommittees on recommendation of the Division or Section President and with the agreement of the Treasurer."

The Treasurer indicated that the situation with respect to payments delegated by him to the Executive Secretary was proving to be more complex than foreseen, and the agreed practice was not being followed exactly. He might wish to introduce some changes in the control of expenditures as part of the introduction of the Guidelines for Handling Income and Expenditures, which would be included eventually in the IUPAC Handbook [cf. Minute 4.2.1 (iii)/90].

3.3/90 Continuation of IUB-IUPAC Joint Commission on Biochemical Nomenclature (Item 12.2, 57th Bureau)

The Secretary General of IUB had noted (90.04.05) that the IUPAC Bureau at Lund had accepted the recommendation of the Chairman of IDCNS for JCBN to be allowed to continue for three more years, i.e., until the end of 1992. However, formal approval from the IUB Executive Committee was still outstanding.

4/90 MINUTES OF MEETINGS OF:

4.1/90 Division/Section Presidents (89.08.10)

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

Prof. Björkman said that he would take up the matter of Divisional Liaison with the CHEMRAWN Committee (Minute 6.2/89), when the latter body met at Warsaw on 90.05.02-04.

4.2/90 Finance Committee (89.08.12 and 90.02.19-20)

The Minutes of the meetings at Lund and Zürich were recorded as having been received officially by the Executive Committee, subject to substitution of "invite" by "coopt" in line 4, page 9, of Minute 10/90.

#### 4.2.1/90 Treasurer's Report

Prof. Björkman drew attention to the following matters:

- (i) The new membership of the Finance Committee had been fully active and involved in the discussions at Zürich. Although he accepted the experiment for the next meeting to coopt the Chairman of the Division/Section Presidents Group, he renewed his wish for one Member of the Finance Committee to have IUPAC operations experience (budgeting and use of allocated funds by bodies).
- (ii) He commented on the annual IUPAC Financial Summaries, being somewhat worried about the variations in "supplementary assets" in view of forward planning, which subject he intended to analyse for the last four biennia.
- (iii) Regretfully, his IUPAC and non-IUPAC commitments so far this year had been too heavy to make much progress in drafting complete Guidelines for Handling IUPAC Income and Expenditure (Minute 8/90). However, he intended to present the draft for discussion with the Secretary General and Secretariat staff at Oxford in June.
- (iv) Regarding internal auditing of the IUPAC accounts (Minute 7/90), the situation had been improved by the Chairman of the Finance Committee, Prof. J.M. Ward, agreeing to take over the responsibility from the Treasurer.
- (v) A first attempt had been made to scrutinize the costs of the Secretariat [Minute 2.2/90, page 2 - Minute 13.3 (i-a)/89].
- (vi) He would himself be evaluating the proposal to freeze subscriptions at the exchange rates applicable at the time of the biennial Council meeting [Minute 2.2/90, page 6 - Minute 14.2/89].
- (vii) Although there was now no attempt to revise the annual budget of the Union [Minute 4.1(i)/90, first paragraph], he still wished to compare the original budget with the eventual accounts.
- (viii) Regarding external auditing of the IUPAC accounts [Minute 4.2/90, page 6 - second paragraph], now that the complete accounting had been moved on 90.01.01 from the IUPAC Banker in Zürich and computerized at the Secretariat in Oxford, it was vital to preserve the tax-free status of the Union in Zürich and to limit the costs of the external audit.

#### 4.2.2/90 Statement of Accounts for 1989 [Minute 4.1(i)/90]

The Treasurer mentioned that:

- (i) The consultant on computerized accounting at the Secretariat had drawn attention to the omission of some traditional items from the annual IUPAC accounts.
- (ii) He would be annotating the 1989 accounts with some footnotes prior to publication in CI later in the year.
- (iii) The discrepancy between the deficit budget forecast and the surplus in the actual accounts for 1989 was probably due largely to the difference in total expenditure on the Lund General Assembly [Minute 4.1(i)/90].

There being no other questions raised, the Executive Committee agreed that the 1989 accounts should be sent for auditing and presentation to Council at Hamburg.

4.2.3/90 Matters Arising from ICSU (Minute 9/90)

The President drew attention to the existing practice, whereby each member international scientific union contributed annually to ICSU 2.5% of the income received from its national membership subscriptions. For the past several years this money had always been repaid to each union, with only the bankers involved in the transactions making any profit. Prof. Jeannin understood that a new proposal was ready to be made by the ICSU Finance Committee. Therefore, the Executive Committee agreed to defer discussion of a proposal from the IUPAC Finance Committee, pending the outcome of the 23rd ICSU General Assembly (Sofia, 90.10.01-05).

The Secretary General stressed that it was essential for IUPAC to remain a member of ICSU.

4.2.4/90 Revision of Standing Orders for Finance Committee (Minute 10/90, page 9)

The changes recommended by the Finance Committee were approved by the Executive Committee. It was decided not to accept the suggestion of the Treasurer, that the period of service of Members should normally be four years, because a corresponding change would be needed for all the other Standing Committees.

4.2.5/90 Forward Plan for IUPAC (Minute 12.2/90)

The President was personally in favour of the proposal. The Treasurer expressed some doubts in view of his own efforts, but he was positive to the initiative from the Finance Committee. The Secretary General was worried about the extra work, of a permanent nature, implicit for the Secretariat staff and Division/Section Officers. The Executive Committee approved the proposal, on a once-only basis, to see which suggestions came forward from Dr. J. Brunner to the Finance Committee Chairman/Treasurer and the Finance Committee. The Executive Secretary should initiate the envisaged activity, but the Secretariat should not spend significant time on the matter.

4.3/90 CHEMRAWN Committee (89.08.11)

The Minutes of the meeting at Lund were recorded as having been received officially by the Executive Committee. The President expressed concern at the poor attendance of the Chairman, Prof. J.M. Thomas, at recent meetings of the CHEMRAWN Committee. He asked the Treasurer to request the Committee to give serious consideration to suggestions for new Members.

4.3.1/90 CHEMRAWN VII: Chemistry of the Atmosphere

The Executive Committee noted with deep sadness the recent death of the Conference General Chairman, Dr. W.O. Roberts, and that the dates had been changed to 91.12.02-06. Referring to his official IUPAC-sponsorship granting letter (90.01.25), the President said that, subject to any serious problems identified by the Treasurer at the forthcoming meeting of the CHEMRAWN Committee (Warsaw, 90.05.02.-04), he was now ready for the Union to guarantee covering any financial deficit on the Conference should this arise.

Prof. Björkman pointed out that, as agreed by the CHEMRAWN Committee at Lund (page 3 of Minutes), CHEMRAWN activities should be self financing through planning of a surplus at each Conference to be added to the Rolling Fund. He

was not too worried that the Rolling Fund might go into deficit in the interim before CHEMRAWN VII provided the needed surplus.

Prof. Koptug spoke briefly about his proposal for CHEMRAWN VIII on Chemical Aspects of Environmental Problems of Industry and Transportation: Current State and Perspectives. The Conference was suggested for 1992, with the plenary sessions in Moscow, then to split the meeting up into several different venues in USSR. In principle, he already had the support of the Soviet Government and its relevant Ministries.

4.4/90 Committee on Chemical Databases (89.08.09-12 and 89.12.09-10)

The Minutes of the meetings at Lund and London were recorded as having been received officially by the Executive Committee. The President drew attention to the changes in membership of CCDB since Lund (Minute 7.1/90). He hoped to meet the new Chairman, Dr. S.R. Heller, in Paris shortly.

4.4.1/90 ENTVAPOR Database

The Executive Secretary reported that the Users Manual was currently being printed by BSP, advertisements would shortly be placed in various recommended journals, and a leaflet was in production for display at selected international symposia and for use by Members of CCDB. Once orders started to arrive, BSP would duplicate the disc (available in 3.5 and 5.5 inch sizes) for sales. In addition, Dr. Williams expected that CCDB would shortly be receiving requests for funding to assist in preparative work on solubility and stability constants IUPAC databases.

Prof. Bard awaited with interest an IUPAC vending initiative from CCDB, offering the ENTVAPOR database to major online organizations, such as ACS or Maxwell-Online. Prof. Sheppard suggested that the ENTVAPOR database should be well advertised to chemical industry.

4.5/90 Committee on Chemistry and Industry (89.08.11)

The Minutes of the meeting at Lund were recorded as having been received officially by the Executive Committee. In order to stress IUPAC's interest in chemical industry, the President announced that he would participate officially throughout the whole of the COCI Workshop on Safety in Chemical Production (Basle, 90.09.10-13). The Treasurer agreed to write to COCI about the philosophy behind his request to involve it in assessing the national chemical turnover of member countries of the Union, which was to be discussed when COCI met at Paris during 90.09.28-29. Prof. Koptug suggested that COCI should be asked to propose subjects for the monographs on Chemistry for the 21st Century.

4.5.1/90 Brochure: Industry and IUPAC

Copies of an attractive brochure, produced recently by COCI in conjunction with the IUPAC Information Officer, were included in the meeting papers for Athens. The Executive Secretary elaborated briefly on the plans for distributing the brochure. The Treasurer pointed out that there was no budgetary provision for the brochure, the costs of which would therefore have to be set against assets, although he had never approved them. The Executive Secretary felt that production of the brochure had already been approved, in principle, by the Executive Committee (Minute 2.5.1/89, 112th Meeting).

4.6/90 Committee on Teaching of Chemistry (89.08.13-14)

The Minutes of the meeting at Lund were recorded as having been received officially by the Executive Committee. It was noted that active collaboration was being considered with the CHEMRAWN Committee in respect of educational aspects of its Conferences (Minute 89/19). The President said that most of the activities of CTC were directed towards the secondary level of education and developing countries. He had drawn the attention of the Chairman of CTC to the need to show more interest in the tertiary level of education, and particularly to involve the new Divisional/Sectional Members in the activities of CTC.

The Treasurer regretted that it had been forgotten to include provision in the 1990-1 IUPAC budget for the new Divisional/Sectional Members of CTC to participate in its meetings [Minute 6(v)/89, 112th Executive Committee]. The President reported that, after consultation with his fellow Officers, he had nominated Prof. Marjorie Gardner for the 1990 Jose Vasconcelos World Award of Education, which was granted by the World Cultural Council in México.

4.7/90 Interdivisional Committee on Nomenclature and Symbols (89.08.08-09)

The Minutes of the meeting at Lund were recorded as having been received officially by the Executive Committee. In response to the general problem of ensuring continuity of knowledge about earlier published IUPAC recommendations on nomenclature and symbols with changing Members of relevant Commissions [Minute 4.9(ii)/89, 112th Executive Committee], the Executive Committee noted that IDCNS urged Commission Officers (IDCNS Minute 9.1) not to be reluctant to apply to the Bureau for membership extensions where appropriate.

4.7.1/90 Revised Guidelines for Drafting IUPAC Recommendations  
(Minute 2.4.1/89, 112th Executive Committee)

The Executive Committee noted and endorsed the Revised Guidelines (IDCNS Minute 7.1). The Guidelines were to be included in the IUPAC Handbook 1989-1991 (and in CI), and the attention of all new Members of IUPAC bodies, including National Representatives, should be drawn to them in their appointment letters.

4.7.2/90 Chairmanship of IDCNS

The Executive Committee noted that Prof. Sheppard wished to retire from the Chairmanship of IDCNS as from the end of the 1991 General Assembly. The President would approach Prof. I.M. Mills (UK) to ascertain whether he was willing to take over the Chairmanship, bearing in mind his other IUPAC commitments.

5/90 FUTURE GENERAL ASSEMBLIES AND CONGRESSES

5.1/90 Arrangements for 36th General Assembly: 1991

(i) The Executive Committee noted the arrangements in hand for holding the Assembly at Hamburg during 91.08.07-15, and expressed its grateful thanks to the FRG-NAO for so efficiently taking over responsibility at short notice from the Greek NAO (Agenda Item 16, 35th Council - Lund). The Chemical Institute at the University in Hamburg would provide the necessary facilities, including accommodation for registration, the Secretariat, and several meeting rooms, with additional meeting rooms to be used in a nearby school. Category B, C, and D hotels could be provided for DEM 120 or less per day (including



breakfast), leaving DEM 60 for meals (lunch in the University would cost DEM 13), i.e., an IUPAC per diem of about USD 100. The Executive Secretary reported that the Deputy Executive Secretary would be visiting Hamburg during 90.05.21-24 to review in more detail the proposed meeting rooms.

(ii) The Secretary General said that CTC, IDCNS, and the Commissions on Nomenclature of Inorganic Chemistry and on Nomenclature of Organic Chemistry wished to meet at Hamburg immediately prior to the Assembly. The Executive Committee agreed that this was cost effective. Prof. Koptuyug felt that it would also be advantageous for the Coordinating Committee on Chemistry and the Environment Programme ((Minute 6.1/90) to meet before the Assembly.

5.2/90 Arrangements for 33rd Congress (Budapest, 91.08.17-22)

There were about 1 700 applications (as at 90.04.06), with 80 persons having accepted to present keynote lectures and 8 persons to give plenary lectures. The second circular was scheduled for distribution in September 1990. The Executive Committee agreed that Prof. Bard, as the new President of the Union at the time of the Congress, should act as the official representative of IUPAC.

5.3/90 Preliminary Arrangements for 37th General Assembly: 1993  
(Agenda Item 20, 35th Council - Lund)

The report of the Deputy Executive Secretary on her visit to Lisbon (90.03.27-28) was noted by the Executive Committee, which felt reassured that the 1993 Assembly (provisionally during 93.08.07-15) could be held efficiently on the campus of Lisbon University, with accommodation at hotels scattered around the city. The Treasurer anticipated a per diem of less than USD 90. The Executive Secretary pointed out that Prof. C.A. Nieto de Castro was too busy to involve expeditiously as the daily contact for IUPAC, and Dr. Williams was asked to identify an appropriate person in Lisbon.

5.4/90 Preliminary Arrangements for 34th Congress: 1993  
(Agenda Item 20, 35th Council - Lund)

The Executive Secretary reported that he had been invited to accompany the President (at no cost to IUPAC) on a lecture visit to Taipei next month. At the same time he would visit Beijing, in order to review arrangements for the 1993 Congress and particularly the envisaged scientific programme (Minute 5.2/84, 49th Bureau - Oxford). The Executive Committee agreed that a member of the national organizing committee should be invited to report to the Division Presidents/Bureau later this year in Milan.

5.5/90 Preliminary Arrangements for 38th General Assembly: 1995  
(Agenda Item 20, 35th Council - Lund)

The Executive Committee noted that good progress had been made in identifying a suitable university campus in respect of the provisional invitation from UK to host the 1995 Assembly. The UK-NAO would be submitting a definite invitation for consideration by Council at Hamburg. Meanwhile, the Secretary General reminded the meeting that until Hamburg it was still open for other NAOs to submit invitations to host the 38th Assembly.

5.6/90 Invitations for 35th Congress: 1995

It was agreed that the Secretary General should invite the NAOs to submit invitations to host the 1995 General Assembly and Congress, mentioning that a provisional invitation had been received from UK for the Assembly (Minute 5.5/90).

6/90 RESTRUCTURING OF IUPAC

The President drew attention to the chart of Organization of IUPAC (1989-1991), which was to appear in the new IUPAC Handbook. Some minor amendments were suggested. In 1993 Prof. Bard would have the responsibility to review the status of the Limited Life Time Commissions created at Lund, after their agreed duration of four years.

6.1/90 IUPAC Chemistry and Environment Programme (CEP)

The Minutes from the inaugural meeting of the Coordinating Committee on Chemistry and Environment Programme (CCCEP - Oxford: 90.03.05-06) had been precirculated. Prof. Koptyug tabled a report on the current state and proposals for CEP, together with copies of the recently printed Chemistry and the Environment: The IUPAC Programme booklet, which was well received by the Executive Committee. He was now ready to reopen the question of IUPAC cooperation with UNEP and ICSU-SCOPE, probably at the time of the Bureau meeting in Milan. Prof. Bard was concerned to avoid overlap with the many other existing international activities in the environmental field, and he preferred IUPAC to focus on just a few topics. Also, Prof. Koptyug tabled a revised draft document on Compilative Information on International Organizations and Programmes Related to Chemical and Biochemical Aspects of Environmental Problems. He would accept additional information until the end of 1990, before finalizing the document, but it could already be used internally by the Union.

Concerning finance for CEP, the Treasurer and Secretary General suggested that advance warning should be given to the NAOs on the need to raise national subscriptions at Hamburg. Prof. Sheppard felt that it would be more difficult for Council to raise subscriptions than at Lund, because they had then been unchanged for several years: there should be a limit to the number of environment projects for each IUPAC body, and perhaps CAs might be invited to help finance the work. However, Prof. Koptyug felt that extra funding would only be required for two-three years, while IUPAC bodies reoriented themselves to the new mission-oriented programmes. The Treasurer reconfirmed that USD 10 000 had been approved to finance the meeting of CCCEP, USD 10 000 to print and distribute the CEP booklet, and USD 75 000 for specific environment activities (USD 8 500 approved for the LLTC on Environmental Analytical Chemistry) - all money to be set against the Union's assets. Prof. Björkman indicated that, prior to his approval for payment, Prof. Koptyug must endorse each proposal to draw on the USD 75 000.

The Secretary General drew attention to his personal reservation whether the CCCEP effort could most effectively be pursued exclusively through a Divisional structure matrix in future. However, he agreed that initially this was the best way to start (CCCEP Minute 6).

The Executive Committee resolved that:

- (i) CCCEP should exist only until Hamburg, but with two additional Subcoordinators - Prof. M. Chastrette (Ecological Aspects in Education) and Prof. J.M. Thomas (CHEMRAWN Conferences Related to Environmental Problems);
- (ii) the President should write to the LLTCs before Milan to ascertain which

projects had been officially started (project initiation forms completed and approved);

(iii) the President should represent the Union at the 2nd IGBP Scientific Advisory Council meeting (Paris, 90.09.03-07).

6.2/90 IUPAC Chemistry and Advanced Materials Programme (CAMP)

The President drew attention to the recently received report on the Advanced Materials Discussion Group meeting (Frankfurt/Main, 90.03.28). He was concerned at the apparent lack of understanding of Prof. W. Heitz on how the new Macromolecular Division's LLTC on Functional Polymers was to operate. The Executive Committee endorsed his view, that he should write to the relevant Division Presidents and advise them a Coordinating Committee on Chemistry and Advanced Materials Programme (CCCAMP) would be created (probably to include the Interdivisional Ad Hoc Committee on Solid State Chemistry, approved by Council at Lund: 35th Meeting - Agenda Item 14): separate and uncoordinated activities in the advanced materials field, within Divisions of the Union, were no longer foreseen. Also, the Executive Committee agreed that Prof. Jeannin should invite Prof. C.N.R. Rao to act as Chief Coordinator for CAMP.

Agenda Item 8.7 (Proposed International Union for Materials Research Societies) was taken at this point in the meeting. Correspondence with Dr. C.W. White about the proposed International Union, and the views of Dr. Mary Good and Prof. Bard that IUPAC should try and establish a cooperative effort on materials science, were noted. The Executive Committee asked Prof. Bard to approach Dr. White accordingly. Prof. Sheppard pointed out that physics was equally important to chemistry in the field of advanced materials.

6.3/90 Terms of Reference for New Limited Life Time Commissions

(i) Council had agreed (35th Meeting, Lund - Agenda Item 14), that terms of reference/projects for the LLTC on Isotope Specific Measurements should be settled by correspondence with the IUPAC President (Executive Committee). Proposed terms of reference from the Chairman, Prof. P. De Bièvre, were considered by the Executive Committee, which reiterated that the abbreviation "II.4" was not permitted for the LLTC and up to five Titular Members were allowed. It was left for the Secretary General and Executive Secretary to agree the final wording with Prof. De Bièvre for the terms of reference before they were included in the new IUPAC Handbook.

(ii) The Executive Committee endorsed the view of the President, that the Macromolecular Division could not create a Commission on Membranes and Barrier Resins, but only a working party on the subject within the new LLTC on Functional polymers.

7/90 IUPAC BODIES

7.1/90 Ratification of Memberships Approved by Correspondence

The appointments, made through correspondence by the President since Lund (Appendix A), were ratified by the Executive Committee.

7.2/90      Nominations of New Members

(i) The Executive Committee approved the proposed new Members for the Editorial Advisory Boards of PAC and CI, for CTC and for IDCNS (Appendix B). Prof. Bard pointed out that at least one of these persons was no longer active in the relevant Division and would therefore constitute an additional cost at the General Assembly. It was agreed that Divisions should take note of this point when proposing new Members at Hamburg and thereafter. The Secretary General stressed that it was essential for the new Divisional/Sectional Members of CTC to report back to their respective Division/Section Committees on the deliberations of CTC.

(ii) The Executive Committee noted that Prof. D.H. Whiffen did not wish to continue as Chairman of PAC-EAB when his first four-year term finished at the end of 1990. It approved the proposal of the Secretary General, that Prof. C.J.H. Schutte (South Africa) should succeed Prof. Whiffen from the start of 1991.

7.3/90      Macromolecular Division Rules

The Executive Secretary reported that problems had arisen at Lund with the elections in the Macromolecular Division. It was now clear that the Division Rules (IUPAC Handbook 1987-1989, p. 245) were not completely compatible with the IUPAC Statutes and Bylaws. Division Rules were often tabled at short notice during the Bureau meeting at a General Assembly, and it was difficult to check their compatibility in full prior to the Council meeting. For example, according to Macromolecular Division Rule 3 the Coopted Members could vote in the election of new Members of the Division Committee, which was not in accordance with Bylaw 4.103 (the Rules of the other Divisions were in order in this respect). Also, Coopted Members were not eligible to participate in the election of new Division Officers (Bylaw 4.104).

Part of the problem lay in the interpretation of "Member" of a Division Committee (Bylaws 4.102 and 4.103), which subject had been considered briefly by the Bureau at Lund (Agenda Item 3.8, 57th Meeting). At Lund the Secretary General had foreseen no difficulty in calling such a person a "Titular" Member (cf. Commissions). However, he was unhappy with the suggestion now of the President to replace the terms "ordinary" and "Coopted" Members of Division Committees by "Titular" and "Associate" Members. Prof. West preferred simply to delete "ordinary" from Bylaw 4.103. Prof. Sheppard advocated the use of "appointed" instead of "ordinary" Member.

The Executive Committee invited the Secretary General, in conjunction with the Executive Secretary, to draft for consideration by the Bureau at Milan a revised text for the Macromolecular Division Rules, taking into account the suggestions of the Division Secretary, Prof. A.D. Jenkins (90.02.23) and the subsequent correspondence.

7.4/90 Solicitation of Funds by Medicinal Chemistry Section

The minutes of a recent meeting of the Medicinal Chemistry Section (New Delhi, 90.02.03-04), indicated that it was investigating the availability of funds for grants to natural products chemists from developing countries. The Executive Committee asked the Treasurer to inform the Section President that, whilst the intention was praiseworthy, more details should be made available to the Bureau at Milan about the aims and plans (cf Statute 9.42).

7.5/90 Committee on Affiliate Membership

Prof. West reminded the meeting that, at Lund the Bureau (Draft Minute 5.4/89, 57th Meeting) had accepted the recommendation of the Executive Committee for an AMP Advisory Group to be formed from within the Bureau itself, to assume responsibility for and development of AMP when he retired as Secretary General in mid-1991. The Executive Committee approved his proposed membership for CAM, the periods of service to be concurrent with those on the Bureau:

Prof. T.S. West (Chairman)  
Prof. M.T. Beck  
Prof. E. Fluck  
Dr. Mary L. Good  
Prof. S. Itô  
Prof. H. Staab  
Prof. K.I. Zamaraev  
with Dr. M.H. Freemantle to act as Secretary

CAM should hold its inaugural meeting in conjunction with the Bureau at Milan.

8/90 RELATIONS WITH OTHER ORGANIZATIONS

8.1/90 Application for Membership

An application for Observer Country status of the Union from the Chemical Society of the South Pacific (90.02.19) was considered. The Secretary General pointed out that the Society was made up of chemists from several island countries in the Pacific. Therefore, the Executive Committee agreed that Associated Organization status was preferable. The Executive Secretary should ask the Society to confirm that it wished to proceed accordingly.

8.2/90 Belgian Membership of IUPAC

The Executive Committee noted that, because its outstanding subscriptions for 1985 and 1988 had not been cleared by the end of 1989, Belgium had automatically ceased to be a Member of the Union (Statute 9.2: letter from Secretary General 90.02.02). The existing Belgian Titular and Associate Members of IUPAC bodies would be allowed to serve out their appointed terms of membership, but no new Members would be appointed. Despite the subscription payment for 1989 received on 90.03.28, the Executive Committee insisted that the outstanding payments for 1985 and 1988 must be made before readmission of Belgium was considered by the Bureau. Prof. P. De Bièvre should be advised

accordingly by the Executive Secretary.

8.3/90 Review of Existing Associated Organizations

Council at Lund [Draft Minute 22(ii)/89, 35th Meeting] had resolved to allow all existing AOs to continue such status for the next four years, except for the International Society of Electrochemistry, Association of Faculties of Science of African Universities-Chemistry Committee, and Federation of Asian Chemical Societies. A statement of current activities of FACS had been received after Lund, and approved by the Secretary General. Also, the IUPAC Commissions on Electrochemistry and on Electroanalytical Chemistry had confirmed there to be no serious overlap between the current activities of ISE and themselves. However, despite a further reminder by registered letter, no statement had been received from AFSAU-CC by the stipulated deadline of 89.12.31 and its AO status had therefore been withdrawn (Secretary General 90.03.16). The Executive Committee ratified the withdrawal of AO status for AFSAU-CC and continuation of such status for FACS and ISE.

8.4/90 Ratification of Application for Observer Country Status

The Executive Committee ratified the acceptance, through correspondence by the President (89.11.09), of an application for Observer Country status from Société Chimique de Tunisie.

8.5/90 ICSU Matters

8.5.1/90 Report on 26th ICSU General Committee (Lisbon, 89.10.11-14)

The Secretary General had diagnosed and expressed concern at a trend in ICSU to revert to its original status as the International Research Council. It was increasingly concerned with organizing major international research efforts, such as the International Geosphere-Biosphere Programme (with a huge financial budget), the ICSU Scientific Committee for Biotechnology, etc. ICSU appeared now to act less like a Council of International Scientific Unions.

8.5.2/90 ICSU Scientific Committee for Biotechnology

The Secretary General elaborated on his recent exchange of correspondence with the Executive Secretary of ICSU and the President of COBIOTECH about the proposed revision of the constitution of COBIOTECH. IUPAC and the other three founding unions of COBIOTECH might no longer have a member/representative on the COBIOTECH Steering Committee, especially now that Dr. J.L. Fox had replaced Prof. M. Ringpfeil as the official representative of IUPAC. If IUPAC was not to have full voting membership in future, Prof. West recommended that it should withdraw from COBIOTECH. The Executive Committee accepted the recommendation, and asked the Secretary General to inform ICSU accordingly.

8.5.3/90 ICSU Request for Funding from UN Development Programme

The Secretary General reported that he had acted as the IUPAC contact person in the preparation by ICSU of a proposal to UNDP for a long-term project on Strengthening Scientific Training and Research in the Third World. After consulting relevant IUPAC Officers at Lund, he had submitted preliminary

material to ICSU (89.08.26), then attended two meetings (Lisbon, 89.10.11-14 and Paris, 89.11.16-17). From his final submission to ICSU (89.11.27), three IUPAC projects had been included in the preliminary ICSU submission to UNDP (90.01.05). The Executive Committee asked Prof. West to enquire about the present status of the ICSU submission.

8.6/90 IUPAC Sponsorship of Museum of Chemistry at Saint-Fons

The President reported that IUPAC had been invited (90.04.04) to sponsor the creation of a cultural centre dedicated exclusively to chemistry and chemical industry - l'Archimium - at Saint-Fons, France. If the invitation was accepted, the Executive Secretary said that it would establish a precedent for similar national centres to apply for sponsorship by the Union, e.g., ACS Beckman Center for the History of Chemistry. However, Prof. Bard had no reservations about accepting the invitation, which would promote chemistry and IUPAC at no cost to the Union. If further such invitations were received, the Secretary General said that IUPAC might need to draw up some criteria on the matter, e.g., we could ask to display some IUPAC material. Prof. Koptug suggested that the NAOs should be circularized to supply details on national centres similar to that at Saint-Fons, with a view to preparing a compendium of information, possibly by CTC. The Executive Committee asked the Secretary General to send an official letter of IUPAC sponsorship to the authorities at Saint-Fons.

8.7/90 IUPAC Status with UN World Health Organization and UN Food and Agricultural Organization

The Executive Committee noted that IUPAC's status as a nongovernmental organization in official relation with WHO had been renewed for another three years from 90.01.01. The President stressed that the Union needed to improve its collaboration with both WHO and FAO, and the appointment respectively as liaison representatives of Dr. H.G.J. Worth and Dr. L.E. Coles was approved.

8.8/90 IUPAC-IUPAP Transfermium Working Group  
(Minute 3.9/86, 52nd Bureau - Oxford)

The President reported that the first phase of the work had been completed: establishment of criteria, which must be satisfied for the discovery of a new chemical element to be recognized. A report, acceptable to the three laboratories of main concern, would shortly come forward for formal approval by IUPAC (and independently by IUPAP). Prof. Jeannin envisaged that the report should be published simultaneously in PAC and in an appropriate international physics journal. The second phase had now started: application of the criteria to elements 101-110. However, no recommendations would be made by the Group on the actual names for these elements, which would remain the responsibility of the IUPAC Commission on Nomenclature of Inorganic Chemistry.

Prof. West was keen to see an abstract of the phase one report published in CI. Prof. Koptug hoped that the phase two report would include a good account of the history of "discovery" of the relevant elements. Prof. Bard felt that IUPAC might have attempted something similar for cold fusion.

8.9/90 General Considerations for Appointment of Official Representatives on Other Organizations

The Secretary General expressed concern at the mechanism of appointing official representatives of the Union to other major organizations like ICSU bodies. This was done by the incoming President at the time of the General Assembly at which he took office (Appendix G to Minutes, 87th Executive Committee - Washington, DC, 1977). Such appointments were critical enough in respect of IUPAC persons who had recent experience at the higher levels of the Union. Persons without any such experience should preferably not be considered. Furthermore, it was essential that appointed representatives reported back in some detail within IUPAC, even if it involved payment of travel and subsistence in order to report directly to the relevant IUPAC body. The Executive Committee accepted the offer of Prof. West to prepare a draft text on the matter for the Bureau at Milan.

8.10/90 Brazilian Chemistry Committee for IUPAC

The Secretary General referred briefly to the background about the readmission of Brazil to the Union (Minute 20/87, 34th Council - Boston). It was on condition that a broadly-based National Committee for Chemistry was formed, with representation from Associação Brasileira de Química (the former NAO), Sociedade Brasileira de Química and two other national societies. Recent correspondence with SBQ indicated that BCC was not functioning properly, and Prof. West had needed to deter SBQ from discontinuing its involvement. The Executive Committee accepted his recommendation that a duplicate set of IUPAC documentation should be sent to SBQ until Hamburg, when the situation should be reviewed. Meanwhile, if the Executive Secretary of BCC was unable to convene a meeting of BCC in the immediate future, she should be advised by Dr. Williams to conduct a postal consultation with the four constituent societies, in order to reach a decision about appointment of the two Brazilian chemists nominated at Lund for membership of IUPAC bodies.

9/90 PUBLICATIONS

9.1/90 Minutes of Publications Committee (89.08.09-11)

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

9.2/90 Supplemental Agreement with Blackwell Scientific Publications

The Executive Secretary reminded the meeting, that the Bureau at Lund (Agenda Item 14.1, 57th Meeting) had accepted the unanimous recommendation of the Publications Committee not to terminate the existing Agreement with BSP. Following consultations within the Union, its lawyers (Linnells of Oxford) had prepared a draft Supplemental Agreement, augmenting the existing Agreement for the years 1990 and 1991. A few amendments to the draft were presently being considered with the Chairman of the Publications Committee, after which the document could be finalized for signature by the Union and BSP.



Based on the royalties received in 1989 and the minimum royalty guarantees for 1990 and 1991 in the new Supplemental Agreement, Dr. Williams anticipated that the budgeted publications surplus in each of these two years would be higher than forecast at Lund.

9.3/90 IUPAC Handbook 1989-1991

The Executive Secretary regretted that, due to the poor working conditions in the Secretariat (Minute 3/90) and shortage of staff since Lund, there was unlikely to be any improvement in availability of the new Handbook compared to that from Boston, i.e., printed copies by the Milan Bureau. However, assuming that the Secretariat situation was remedied by Hamburg, the next Handbook could be ready for the 1992 Spring meeting of the Executive Committee.

9.4/90 History of IUPAC (Draft Minute 14.3/89. 57th Bureau)

A status report (as 90.04.22) was received from Mr. R.W. Fennell. Comments on the first draft of chapters 1-3 had been received from Prof. West and Dr. Williams and incorporated into a second draft. The first draft of chapter 4 was being prepared.

10/90 SPONSORSHIP OF SYMPOSIA

10.1/90 Ratification of IUPAC Sponsorship of Symposia

The sponsorships of symposia (Appendix C), approved through correspondence by the Secretary General on behalf of the President since the 57th Bureau meeting, were ratified by the Executive Committee.

10.2/90 Ratification of Official Representatives to IUPAC-sponsored Symposia

The appointments of official representatives of IUPAC to its sponsored symposia (Appendix D), as made on behalf of the President since the 57th Bureau meeting, were ratified by the Executive Committee.

10.3/90 Criteria for Granting Subventions to IUPAC-sponsored Symposia

Prof. Bard suggested that, in future, organizers of all sponsored symposia should be invited to submit requests for subventions annually to IUPAC by an agreed deadline. The biennial budget allocation for this purpose could be divided equally between the two years. However, the Secretary General was apprehensive to take such action: the amount of money available was relatively small, and there could be many disappointments. The Executive Committee agreed to continue with the present ad hoc system, which the Executive Secretary said would be better publicized henceforth, by inclusion in the new IUPAC Handbook of guidelines for applying for sponsorship of and financial subventions for symposia.

Also, it was agreed that, in future, requests (accompanied by a draft realistic budget) should be considered by correspondence by the Officers (on

behalf of the Executive Committee/Bureau), taking the advice of a relevant Division President if necessary. The present criteria guidelines (Appendix G to Minutes, 87th Executive Committee - Washington, DC) were revised as follows, in order of priority, each request to be judged on its merits:

- (i) Is the subject a new and developing area of chemistry, or is it part of a well established series on a particular theme?
- (ii) Is the symposium to take place in a developing country or one located at great distance (e.g., New Zealand) from normal venues (e.g., Europe, Japan, North America)?
- (iii) For what purpose(s) do the organizers wish to use a subvention? (IUPAC requires it to be used for scientific purposes, e.g., to support participation of plenary lecturers or the attendance of chemists from developing countries, but not for social events.)

10.4/90      Subvention for 14th International Symposium on Organic Chemistry of Sulfur

After careful consideration of the application (90.03.21), it was decided not to make a grant, this being the fourteenth in a well established series on a particular theme. The President should advise the organizers accordingly.

10.5/90      Subvention for 11th International Symposium on Medicinal Chemistry

Despite the fact that it was the eleventh in a well established series on a particular theme, the Executive Committee decided to grant a subvention of USD 1 000 in recognition of the recent creation by the Union of a Section on Medicinal Chemistry. The President should advise the organizers accordingly.

11/90      REPORT ON SECRETARIAT

(i) The Secretary General said that his annual staff inspection for 1990 had been delayed, because he had visited the Secretariat on other IUPAC business so many times since Lund. He confirmed that refurbishment of the adjacent shopping centre over the past 1-2 years had been traumatic (Minute 3/90), but it was now complete, with an improved environment. Two additional rooms were being leased at Bank Court Chambers, and the whole suite on the first floor was currently being refurbished by IUPAC, as authorized by the Treasurer. Tensions amongst the senior staff had been aired at a meeting early in 1990 with the Treasurer and himself, following which each person had put forward suggestions for refurbishment of the Secretariat. A consensus decision was then reached on how to proceed, with the Executive Secretary making personal concessions in order to secure a future concord.

(ii) For the past decade the staff had been allocated to positions on the salary scales of UK universities. However, in view of governmental financial restrictions being increasingly placed on UK universities, two of the Secretariat staff were unhappy with this system. Accordingly, Prof. West had

obtained job descriptions for each member of the Secretariat staff, and sent them by arrangement to the Executive Secretaries of the Royal Society and the Royal Society of Chemistry in UK, together with information on the salary scales of the Secretariat and other relevant details (pension arrangements, private health scheme provision, etc.). He had asked them to judge if the Union was underpaying the IUPAC staff overall and in particular cases. Subsequently, he had made visits to London to interview and provide further information to the two Executive Secretaries. Also, he had raised queries made by IUPAC staff about the provision of cost of living allowances for Oxford, such as those allocated for London and Cambridge, and the provision of free cars as allegedly made to some RSC staff.

Both Executive Secretaries consulted their financial officers in the processes of making their assessments, which were transmitted verbally to the Secretary General during his visits to their offices. Independently of each other, both Executive Secretaries said that the IUPAC scales were entirely satisfactory, and that individuals were being treated quite generously and, in some cases, very generously. In their views, there was no case to apply an Oxford cost of living allowance. RSC supplied only one official car for one individual, who had to move regularly and frequently between London, Nottingham, and Cambridge, as part of his job.

Under the circumstances, the Secretary General felt that there was no need to change to the salary scales of the RS or RSC. Also, he felt that recent changes to the remuneration of individuals at the Secretariat had taken some of the pressure from the situation. He would be suggesting some additional changes, when some members of staff had assumed new responsibilities, which he proposed to suggest to them in the near future.

The Executive Committee agreed that, at present, no further action was necessary, and that remuneration of the IUPAC staff should continue to be made on the current scales for UK universities.

#### 12/90 DATES AND PLACE OF NEXT EXECUTIVE COMMITTEE MEETING

The South African NAO had agreed to defer until 1991 its invitation for the Executive Committee to meet in South Africa (Minute 11/89, 112th Executive Committee). It was noted with appreciation, that the NAO would make an amount of ZAR 50 000 (about USD 18 870) available to assist members of the Executive Committee to travel to South Africa.

Because of his teaching duties Prof. Bard preferred the meeting to take place later than the customary dates in April. After careful consideration, it was agreed that 10th-11th May 1991 were the most suitable dates. Since Dr. Mary Good was not present, Prof. Bard was asked to check on her availability when he returned to USA.

13/90 ANY OTHER BUSINESS

13.1/90 Cash in East European Banks

The Treasurer was concerned that the Union was losing money in Poland on the Affiliate subscriptions paid in zlotys. If possible, he proposed to make use of the money when he and the Information Officer attended the CHEMRAWN Committee meeting in Warsaw on 90.05.02-04.

VOTES OF THANKS

Votes of thanks were recorded to the Association of Greek Chemists for the provision of hospitality and facilities.

\* \* \* \* \*

CHAIRMAN:

Y. Jannini

DATE:

14 May 1991

RATIFICATION OF MEMBERSHIPS APPROVED BY CORRESPONDENCEI. STANDING COMMITTEESCommittee on Chemical Databases

Dr. S.R. Heller (USA)	- Chairman and Member (1990-1993)
Dr. C. Jochum (FRG)	- Secretary and Member (1990-1993)
Dr. V.I. Smirnov (USSR)	- Member (1990-1993)
Dr. Y. Wolman (Israel)	- Member (1990-1993)
Dr. G. Adamson (UK)	- Associate Member (1990-1993)
Dr. H. Kaindl (Switzerland)	- Associate Member (1990-1993)
Mr. J.G. Kaufman (USA)	- Associate Member (1990-1993)
Dr. H.V. Kehiaian (France)	- Associate Member (1990-1993)

Committee on Publications

Prof. K.I. Zamaraev (USSR)	- Member (1990-1993)
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Committee on Teaching of Chemistry

Drs. J. Bouma (Netherlands)	- Member (1990-1993)
Prof. Marjorie Gardner (USA)	- Member (1981-1990: term extended exceptionally for one more year)
Prof. R. Isuyama (Brazil)	- Member (1990-1993)
Prof. Y.D. Tretyakov (USSR)	- Member (1990-1993)

Finance Committee

Prof. J.M. Ward (UK)	- Chairman and Member (1990-1993)
Dr. J. Brunner (Switzerland)	- Member (1990-1993)
Prof. E.J. Grzywa (Poland)	- Member (1990-1993)
Dr. L.C. Krogh (USA)	- Member (1990-1993)

IUB-IUPAC Joint Commission on Biochemical Nomenclature

Prof. D. Coucouvanis (USA)	- Member (1990-1993)
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II. COMMISSIONSCommission on Chemical Kinetics

Dr. J.T. Herron (USA)	- Associate Member (1989-1993)
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Commission on Photochemistry

Prof. M. Ohashi (Japan) - Titular Member (1989-1993)

Commission on Microchemical Techniques and Trace Analysis

Dr. W.P. Cofino (Netherlands) - Associate Member (1989-1993)

Dr. J. Edmunds (Australia) - Associate Member (1989-1993)

Dr. G.R. Rhodes (USA) - Associate Member (1989-1993)

Dr. H.W. Werner (Netherlands) - Associate Member (1989-1993)

Commission on Oils, Fats, and Derivatives

Dr. Alice Nasner (FRG) - Associate Member (1989-1993)

Dr. F. Mordret (France) - Associate Member (1989-1993)

Commission on Water Chemistry

Dr. W.J.G.M. Peijnenburg - Secretary and Titular Member  
(Netherlands) (1989-1993)

III. INTERDIVISIONAL AD HOC COMMITTEE ON SOLID STATE CHEMISTRY

Prof. R. Metselaar - Convenor  
Prof. B. Delmon - Physical Chemistry Division  
Prof. C.N.R. Rao - Physical Chemistry Division  
Prof. V.V. Boldyrev - Inorganic Chemistry Division  
Prof. P. Hagenmüller - Inorganic Chemistry Division  
Prof. T.A. Albright - Organic Chemistry Division  
Dr. A. Heller - Organic Chemistry Division  
Prof. A. Abe - Macromolecular Division  
Prof. E.F. Oleinik - Macromolecular Division  
Prof. Yu. D. Tretyakov - Committee on Teaching of  
Chemistry

NOMINATIONS OF NEW MEMBERS (\*)PURE AND APPLIED CHEMISTRY EDITORIAL  
ADVISORY BOARD (PAC-EAB)Members

Prof. D. H. Whiffen (1986-1990)  
Chairman  
Mr. P. D. Gujral  
Secretary

Dr. E. D. Becker (1987-1991)  
Committee on Publications  
\*Prof. J. Reedijk (1989-1993)  
Interdivisional Committee on  
Nomenclature and Symbols  
Prof. J. Haber (1987-1991)  
Physical Chemistry Division  
Prof. E. Fluck (1983-1991)  
Inorganic Chemistry Division  
Prof. N. J. Leonard (1983-1991)  
Organic Chemistry Division  
Prof. A. D. Jenkins (1987-1991)  
Macromolecular Division  
\*Prof. G. den Boef (1989-1993)  
Analytical Chemistry Division  
Dr. L. E. Coles (1983-1991)  
Applied Chemistry Division  
Prof. W. C. Purdy (1983-1991)  
Clinical Chemistry Division  
\*Prof. C. G. Wermuth (1989-1993)  
Section on Medicinal Chemistry

CHEMISTRY INTERNATIONAL EDITORIAL  
ADVISORY BOARD (CI-EAB)Members

Prof. T. S. West (1983-1991)  
Chairman  
Dr. M. H. Freemantle  
Secretary

Dr. R. H. Marchessault (1985-1992)  
CHEMRAWN Committee  
Dr. S. R. Heller (1987-1991)  
Committee on Chemical Databases  
Dr. D. A. A. Fagandini (1987-1991)  
Committee on Chemistry and Industry  
\*Dr. E. D. Becker (1989-1990)  
Committee on Publications  
\*Prof. K. V. Sané (1989-1993)  
Committee on Teaching of Chemistry  
Prof. K. Kuchitsu (1987-1991)  
Interdivisional Committee on  
Nomenclature and Symbols  
\*Prof. R. A. Alberty (1989-1993)  
Physical Chemistry Division  
Prof. E. Fluck (1983-1991)  
Inorganic Chemistry Division  
Prof. N. J. Leonard (1983-1991)  
Organic Chemistry Division  
Prof. A. D. Jenkins (1987-1991)  
Macromolecular Division  
\*Prof. G. Svehla (1989-1993)  
Analytical Chemistry Division  
Dr. L. E. Coles (1983-1991)  
Applied Chemistry Division  
Prof. N. Montalbetti (1987-1991)  
Clinical Chemistry Division

\*Prof. C. G. Wermuth (1989-1993)  
Section on Clinical Chemistry

COMMITTEE ON TEACHING OF CHEMISTRY  
(CTC)

(Established 1963)

Members

Prof. M. Chastrette (1981-1990)  
Chairman  
Prof. K. V. Sané (1986-1990)  
Secretary

Drs. J. Bouma (1990-1993)  
Prof. Marjorie Gardner (1981-1990)  
Prof. R. J. Gillespie (1986-1990)  
Prof. R. Isuyama (1990-1993)  
Prof. J. T. Shimozawa (1983-1991)  
Prof. Y. D. Tretyakov (1990-1993)

Divisional Members

\*Prof. 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. Cefelin (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)  
Section on Medicinal Chemistry

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

Members

Prof. N. Sheppard (1987-1991)  
Chairman  
Dr. A. D. McNaught (1987-1991)  
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. M. Grasserbauer (1983-1991)  
Analytical Chemistry Division
- \* Mr. J. A. Tetlow (1989-1993)  
Applied Chemistry Division
- \* Mr. J. C. Rigg (1989-1993)  
Clinical Chemistry Division  
(To be appointed)  
Section on Medicinal Chemistry

Associate Members

- \* Prof. I. M. Mills (1983-1989)  
Physical Chemistry Division
- Prof. J. Corish (1985-1993)  
Inorganic Chemistry Division
- Dr. O. Weissbach (1987-1991)  
Organic Chemistry Division
- Dr. R. E. Bareiss (1985-1993)  
Macromolecular Division
- \* Prof. A. Townshend (1989-1991)  
Analytical Chemistry Division
- Dr. R. Greenhalgh (1985-1993)  
Applied Chemistry Division
- \* Mr. M. Lauritzen (1989-1993)  
Clinical Chemistry Division  
(To be appointed)  
Section on Medicinal Chemistry



SPONSORSHIPS OF SYMPOSIA BY IUPAC APPROVED BYCORRESPONDENCE SINCE 57th BUREAU MEETING

14th International Symposium on Organic Chemistry of Sulfur  
Lodz, Poland: 2nd-7th September 1990

11th International Symposium on Medicinal Chemistry  
Jerusalem, Israel: 2nd-7th September 1990

4th International Colloquium on Solid Sampling with Optical Atomic Spectroscopy  
Jülich, FRG: 8th-10th October 1990

19th Congreso Latinoamericano de Química  
Buenos Aires, Argentina: 5th-9th November 1990

International Symposium and Workshop on Food Safety, Mycotoxins & Phycotoxins  
Cairo, Arab Republic of Egypt: 4th-15th November 1990

7th International Conference on Surface and Colloid Science  
Compiègne, France: 7th-12th July 1991

14th Discussion Conference on Macromolecules: Rheology of Polymer Melts  
Prague, Czechoslovakia: 15th-19th July 1991

10th International Symposium on Plasma Chemistry  
Jerusalem, Israel: 29th July-4th August 1991

33rd IUPAC Congress  
Budapest, Hungary: 17th-22nd August 1991

4th International Symposium on Macromolecule-Metal Complexes  
Siena, Italy: 30th September-5th October 1991

CHEMRAWN VII - World Conference on Chemistry of the Atmosphere: Its Impact on  
Global Change  
Baltimore, Maryland/USA: 2nd-6th December 1991

IUPAC International Symposium on New Polymers  
Kyoto, Japan: 30th November-1st December 1991

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

International Symposium on Risk Management of Chemicals: Can Chemicals be Used  
Safely?  
Guildford, UK: 13th-16th July 1992

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

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

International Conference on Analytical Chemistry  
Reading, UK: 20th-26th September 1992

OFFICIAL REPRESENTATIVES TO IUPAC-SPONSORED SYMPOSIA

APPROVED BY CORRESPONDENCE

SINCE 57TH BUREAU MEETING

3rd International Seminar on Flame Structure  
Alma-Ata, USSR: 18th-22nd September 1989  
Prof. E. T. Denisov

\* \* \* \* \*

17th International Symposium on Chemistry of Natural Products  
New Delhi, India: 4th-9th February 1990  
Prof. G. OURISSON

2nd International Symposium on Characterization of Porous Solids  
Alicante, Spain: 6th-9th May 1990  
Prof. J. A. PAJARES

9th International Symposium on Carotenoids  
Kyoto, Japan: 20th-25th May 1990  
Prof. B. L. C. WEEDON

10th International Symposium on Polymer Networks  
Jerusalem, Israel: 20th-25th May 1990  
Prof. J. JORTNER

International Symposium on Trace Elements in Health and Disease  
Helsinki, Finland: 5th-8th June 1990  
Prof. N. MONTALBETTI

International Symposium on Unsteady State Processes in Catalysis  
Novosibirsk, USSR: 5th-8th June 1990  
Prof. V. A. KOPTYUG

7th World Ceramics Congress  
Rimini, Italy: 24th-28th June 1990  
Prof. E. FLUCK

33rd International Symposium on Macromolecules  
Montreal, Canada: 8th-13th July 1990  
Prof. W. HEITZ

13th Discussion Conference on Macromolecules: Mechanisms of Polymer  
Strength and Toughness  
Prague, Czechoslovakia: 16th-19th July 1990  
LETTER OF GREETINGS

13th IUPAC International Symposium on Photochemistry  
Warwick, UK: 22nd-28th July 1990  
Prof. S. BRASLAVSKY

3rd International Symposium on Polymer Analysis and Characterization  
Brno, Czechoslovakia: 23rd-25th July 1990  
Prof. J. STEJSKAL

8th International Conference on Organic Synthesis  
Helsinki, Finland: 23rd-27th July 1990  
Prof. I. BELETSKAYA

7th International Meeting on Boron Chemistry  
Torun, Poland: 30th July-3rd August 1990  
Prof. N. N. GREENWOOD

4th International Symposium on Solubility Phenomena  
Troy, New York/USA: 1st-3rd August 1990  
Prof. G. NANCOLLAS

7th International Congress of Pesticide Chemistry  
Hamburg, FRG: 5th-11th August 1990  
Prof. Y. P. JEANNIN

11th International Conference on Solution Chemistry  
Ottawa, Canada: 6th-10th August 1990  
Prof. G. SOMSEN

10th International Conference on Physical Organic Chemistry  
Haifa, Israel: 6th-10th August 1990  
Prof. H. ZOLLINGER

15th International Carbohydrates Symposium  
Yokohama, Japan: 12th-17th August 1990  
Prof. S. ITO

12th International Conference on Raman Spectroscopy  
South Carolina/USA: 13th-17th August 1990  
Prof. B. SCHRADER

28th International Conference on Coordination Chemistry  
Gera, GDR: 13th-18th August 1990  
Prof. E. FLUCK

11th IUPAC Conference on Chemical Thermodynamics  
Como, Italy: 27th-31st August 1990  
Dr. P. A. G. O'HARE

11th International Conference on Medicinal Chemistry  
Jerusalem, Israel: 2nd-7th September 1990  
Prof. C. G. WERMUTH

14th International Symposium on Organic Chemistry of Sulfur  
Lodz, Poland: 2nd-7th September 1990  
Prof. J. MICHALSKI

International Symposium on Mechanisms and Kinetics of Polymerization  
Reactions  
Paris, France: 9th-13th September 1990  
Prof. W. HEITZ

1st IUPAC Workshop on Safety in Chemical Production  
Basel, Switzerland: 10th-13th September 1990  
Prof. Y. P. JEANNIN

4th International Colloquium on Solid Sampling with Optical Atomic  
Spectroscopy  
Jülich, FRG: 8th-10th October 1990  
Prof. G. DEN BOEF

4th International Congress on Automation and New Technology in the  
Clinical Laboratory  
Barcelona, Spain: 9th-12th October 1990  
Prof. N. MONTALBETTI

International Symposium and Workshop on Mycotoxins and Phycotoxins  
Cairo, Egypt: 4th-15th November 1990  
Dr. W. HORWITZ

International Symposium on Speciality Polymers  
Singapore: 7th-9th November 1990  
Prof. T. SAEGUSA