

INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY

MINUTES OF THE BUREAU MEETING

held in Leningrad
in the premises of the Maison des Savants on
May 25 and 26, 1960.

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Present: Dr W.A. Noyes, Jr., President
Prof. R. Belcher - Dr J.H. Bushill - Prof. G. Chaudron -
Prof. H.J. Emeléus - Prof. H. Erdtman -
Academicien B.A. Kasanski - Prof. W. Klemm -
Prof. E.J. King - Prof. W. Kuhn - Prof. M. Letort -
Prof. S. Mizushima - Dr R. Morf - Prof. A. Tiselius -
Sir Alexander Todd - Prof. T. Urbanski -
Prof. P.E. Verkade - Dr E. Wichers

Excused : Sir Charles Dodds
Prof. M. Lora-Tamayo
Prof. D. Marotta
Prof. A. Stoll

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AGENDA

1. Agenda
2. Minutes of the last meeting
3. Auditors' Statement
4. Treasurer's report for 1959 made by President Noyes in the absence of Sir Charles Dodds
5. Liabilities
 - a) Reimbursement to Butterworths
 - b) Reimbursement to Sandoz for 1959
 - c) Taxes to the United Kingdom
 - d) Arrears for travel expenses to Munich
6. Provisional budget for 1960 and 1961 (these 2 items must be reconsidered at the last point of this agenda when all the other problems have been decided upon)
Administrative expenses
7. Investments - decision to be taken with regard to taxes
8. Reports of the six Section Presidents
9. Activities of Commissions and Divisions and possibilities to co-ordinate their activities
10. IUPAC Journal and agreement to the appointment of the Editor
Language problems and their financial implications
11. Report and decision regarding Geochemistry
IUPAC representative at the XIIth General Assembly, Helsinki 1960 and at the Geological Congress, Copenhagen 1960
Nomination of an IUPAC representative in SCOR
12. Programme for Montreal and decision to be taken regarding travel and subsistence
 - Symposium on Macromolecular Chemistry / Plastics
 - Symposium on High Temperatures
 - Symposium on Microtechniques
 - Symposium on Pesticides / Toxicology / Food Additives
 - Symposium on Wood Chemistry
13. Sponsorship of IUPAC - decision to be taken on a question of principle and sponsorship given to the following events :
 - Symposium on the Reactivity of Solids - Amsterdam 1960
 - Symposium on Geochemistry - Copenhagen 1960
 - Symposium on Age Determination - Helsinki 1960
 - Symposium on Plastics - Turin 1960
 - Vith International Conference on Co-ordination Chemistry - Detroit 1961
 - Symposium on Organo-Metallic Complexes - Brussels 1961
 - Symposium on Molecular Spectroscopy - Japan 1962
 - Conference on Co-ordination Chemistry - Stockholm 1962
 - Symposium on Natural Products - Prague 1962
 - Symposium on Pharmaceutical Products - Florence 1962
 - Symposium or Colloquium - Ireland 1962 or 1964
14. Final Budget for 1960
15. Final Budget for 1961
16. Action to be taken following the recommendation of the Finance Committee
Annual dues of Member Countries
17. Elections and proposals to be made
18. Chemical Engineering
19. Any other business
20. Memorandum of President Noyes
21. Proposals to be made aiming at making future conferences more attractive
22. How can Member Countries which are bearing the financial burden be interested in IUPAC ?
23. Member Countries
24. Next meeting

Minute 9

AGENDA

Resolved: To approve the agenda on the understanding that the sequence of the items may be changed and that several points may not be dealt with.

Minute 10

MINUTES OF THE LAST MEETING

The Minutes of the Bureau meeting in Munich having been previously circulated in a draft version and the comments received having been considered, were approved without change.

Minute 11

AUDITORS' STATEMENT

The Auditors' Statement on the Honorary Treasurer's Report and the 2 years account as submitted at the end of the XXth Conference to the Bureau and the Council by the 'Treuhand-Vereinigung' was considered and approved by both bodies. Moreover, the Executive Committee in its 43rd meeting in Paris, as minuted under Minute 5, resolved:

"That the report of the auditors should be approved."

This item was once more on the agenda and was reconsidered. The English version was not properly worded and was not in conformity with the French and the German texts. It was therefore

resolved:

- i) That the Auditors' Statement in the French version be accepted
- ii) That the Auditors be requested to produce an appropriate English version.

The Secretary General to act.

Minute 12

TREASURER'S REPORT FOR 1959

The President gave an explanation of the Treasurer's Report which had been previously circulated to the members. The Treasurer's Report, being an intermediate one year report, needs no action by the Bureau. Those points in the Treasurer's Report which require action are submitted to the Bureau as special items. The President pointed out specially that the strong financial position of the Union was due only to sacrifices of many people who, without being properly reimbursed for their expenses, had devoted their time and efforts for the benefit of the Union. The hardship imposed by the \$ 400 ceiling for travel expenses and the absence of Titular Members from meetings enabled the Union to function with a limited income. If the activity of the Union is to be increased, it will be necessary to increase income accordingly.

Prof. Emeléus proposed that the last sentence on page 1 of the Treasurer's Report should read as follows :

"Profits on the sale of investments were negligible."

Resolved:

- i) That the Honorary Treasurer be thanked for his Report
- ii) That this Treasurer's Report shall not be published.

M i n u t e 13

REIMBURSEMENT TO BUTTERWORTHS

Owing to a contract signed by Prof. A. Stoll and the Honorary Treasurer two years ago, the official publishers of the Union, Messrs. Butterworths Ltd., are entitled to royalties for translations and reprinting of Nomenclature Rules. Since the reprinting of the Nomenclature Rules have been delayed, these royalties must be paid in 1960. A sum of \$ 5268.- must be provided.

Resolved:

That the Executive Committee have to negotiate with Messrs. Butterworths Ltd. and subsequently to pay the amount necessary to meet the above claims.

M i n u t e 14

REIMBURSEMENT TO SANDOZ FOR 1959

A debit note from Messrs. Sandoz for SFr. 21,000 was received on December 18, 1959, and the President felt that the competence of the Executive Committee was not sufficient to pay the debit note without asking for the advice and the decision of the Bureau.

Since the amount claimed by Messrs. Sandoz was only a fraction of the actual amount paid by the company in favour of the Union, and, although a written and clear contract or agreement had not been produced by Messrs. Sandoz, the Bureau unanimously

resolved:

- i) To thank Messrs. Sandoz for their valuable service in the past years
- ii) To instruct our bankers, the Union Bank of Switzerland, to pay the amount of SFr. 21,000 to Messrs. Sandoz.

M i n u t e 15

TAXES TO THE UNITED KINGDOM

Most of the investments of the Union are British stocks. Since the annual interest amounts to some \$ 5000.-, a sum of \$ 1000.- a year must be paid as taxes to the United Kingdom.

The problem arose whether, in order to avoid this taxation, a transfer of the Union's investments should be made to a country more favourable with regard to taxation. Another possibility would be an attempt to have the Union incorporated under British law. It was

resolved:

- i) To ask the lawyers of the Royal Society to make an estimate of costs and of the feasibility of such a registration in the United Kingdom.

Dr D. C. Martin to act.

- ii) To seek advice from Swiss and German Bankers as to the consequences of a possible transfer of the investments to another country

The Secretary General to act.

- iii) To empower the Executive Committee to take action if urgent action should become necessary.

Minute 16

PROVISIONAL BUDGET FOR 1960

Considering the Minutes of the Paris Executive meeting (Minute 22, ii) where it was proposed:

"To authorize IUPAC officers to claim for additional amounts at the next meeting of the Bureau, if necessary." The Bureau

resolved: That the tentative budget which consists in a revised version of the budget listed as an appendix to the minutes of the 43rd meeting, be approved.

Further it was agreed that as a long-term policy all the officers should be reimbursed for their expenses in full.

Minute 17

ADMINISTRATIVE EXPENSES

The Bureau

resolved:

- i) To increase the subvention for the Inorganic Nomenclature Commission from \$ 350 to \$ 500
- ii) To increase the subvention for the Analytical Chemistry Section from \$ 1000 to \$ 1500
- iii) To increase the subvention of the Applied Chemistry Section from \$ 6040 to \$ 6940

Minute 18

GENERAL RULES FOR THE CONDUCT OF THE BUSINESS OF THE UNION

A letter received from Dr Guéron, the new Secretary of the Atomic Weights Commission, in which he asked for guidance about his functions and about the perquisites of his office, gave rise to a long discussion and to a decision on a question of principle. It was

resolved: That an ad hoc Committee consisting of Prof. Verkade (Chairman) Profs. Emeléus and Kuhn and Dr Morf, should be established to formulate general rules for the conduct of business of the Union, particularly those affecting all Secretaries.

Prof. Emeléus suggested that these rules should also include instructions for Presidents of Sections, Divisions, and Commissions.

It was also suggested that it might be advisable to empower Section Presidents to appoint Section secretaries who are able and willing to assume substantial fractions of the Presidents' burdens.

Minute 19

REPORTS OF THE SECTION PRESIDENTS

The Bureau

resolved:

- i) To approve the reports made by the 6 Section Presidents on the activities since the Munich meeting of their respective Sections (see Appendix A-F)
- ii) To thank the Section Presidents for their activity.

Minute 20

REORGANISATION OF THE APPLIED CHEMISTRY SECTION

The Section President of the Applied Chemistry Section distributed a very detailed memorandum treating with the possibilities of concentrating the activities of his Section. The development in the past, where a dangerous growth of the Section resulted from the creating of many new Divisions, was considered. Further, the problems related to Chemical Engineering were also treated. Taking into consideration the recommendations made by the Executive Committee in its meeting of May 24, (see Appendix G) and the unanimous desire that close co-operation between pure chemistry and chemical engineering would be to the benefit of both disciplines, it was

resolved:

- i) To endeavour to get into close connection with the existing bodies in the field of Chemical Engineering.
- ii) To invite the President of the Applied Chemistry Section to attend the next meeting of the Executive Committee in autumn 1960, where the whole problem will be treated in detail.
- iii) To ask all Bureau members to discuss the important problem of Chemical Engineering with the competent personalities in their respective countries.
- iv) To ask Prof. Klemm that he should, together with Dr Morf, contact Prof. Winnacker, President of the European Federation of Chemical Engineers.
- v) To invite all Bureau members to report back on this matter.

Minute 21

ACTIVITIES OF COMMISSIONS AND DIVISIONS

As was suggested in the Report of the Finance Committee, further vigorous attempts at economy should be made by e.g. reducing the number of Commissions and Divisions. Six Commissions and Divisions which obviously seem to overlap in their activities have repeatedly been the target of comments :

Macromolecules /Plastics and High Polymers ; Molecular Spectroscopy/Spectrochemical and other Optical Procedures for Analysis ; Electrochemistry/Electrochemical Data ; In spite of our efforts it was not possible to wind up one or the other of these Commissions and Divisions. Neither Commission Presidents nor Section Presidents were in a position to draw up a satisfactory solution.

No resolution.

Minute 22

PUBLICATIONS

President Noyes made a report on the new contract signed with Messrs. Butterworths Ltd., in London and announced that the Journal "Pure and Applied Chemistry" will appear in a few weeks. It was

resolved: To approve the nomination of Dr B. C. L. Weedon as Chief Editor.

Minute 23

PROCEDURE TO BE FOLLOWED CONCERNING PRELIMINARY AND PROVISIONAL RECOMMENDATIONS

Problems arose to decide whether such tentative recommendations and rules should be distributed widely or whether it would be preferable to distribute tentative rules and recommendations only to a limited and carefully selected number of scientists. In view of the dangers inherent in a wide dissemination of tentative rules without adequate control, it was

resolved:

- i) Each number of the Journal shall contain a list of titles of any tentative report on e. g. symbols, nomenclature, etc. issued by Commissions of the Union in the Information Bulletin, with an indication that copies may be obtained, at a price to be fixed, by the Secretary General. Every such notice shall be accompanied by a statement stressing the tentative nature of these reports, the reason for their issue and their liability to modification in the light of comments received before the next Conference of the Union; it should also be pointed out that when such Reports are to be regarded as official they will be published in the Journal.

Following this resolution it was

resolved:

- ii) To print the provisional rules of the Nomenclature of Steroids, in the English version, in the Information Bulletin of IUPAC
- iii) To distribute separate reprints of these rules to personalities designated by the Organic Chemistry Section and the Biological Chemistry Section
- iv) To sell these separate reprints, at a price fixed by the Secretary General, to those persons interested in these fields.

Minute 24

PROBLEM OF LANGUAGES

Taking the procedure adopted in the Statutes of the Union as an example, it was

resolved: That only the original of a report shall be the authentic text. The translation of this original text in the second official language of the Union will be provided either by the British National Committee for Chemistry or by the Comité national français de la Chimie. This translation will be submitted to the Executive Committee for approval, in accordance with the procedure adopted when publishing and translating the Nomenclature Rules for Organic Chemistry.

- (Definite Rules for
1. Section A : Hydrocarbons
Section B : Fundamental Heterocyclic Systems
 2. The Nomenclature of Steroids
Tentative Rules for Nomenclature in the Vitamin B₁₂ fields)

Minute 25

GEOCHEMISTRY

Considering the memorandum drafted by Prof. Emeléus and Dr Morf, and taking into account the report of the Münster meeting (see Appendix H), it was

resolved:

- i) That in view of the great diversity of interests of the Geochemistry Commission and the complexity of its tasks, it seems necessary that it should seek, within IUPAC, close co-operation with the Physical, the Inorganic, the Analytical and the Applied Chemistry Sections. A close collaboration of geophysicists and geologists is of the same urgency. Without great administrative costs, such a co-operation can be realised by forming a Joint Division of Geochemistry, under the auspices of the Section of Inorganic Chemistry of IUPAC. It is proposed that this Joint Division of Geochemistry be allowed to form and maintain a commission and sub-commissions. If this Commission needs monetary subventions, the Bureau and the Council of IUPAC will have to approve in advance the exact working programme, which should also mention the duration of the work and the appointments contemplated.
- ii) That the above mentioned collaboration within IUPAC be guaranteed by appointing representatives of the different Sections to the Joint Division or its commission, either as Titular Members or as Observers. The geophysicists (IUGG) might make their contribution by nominating 2 or 3 scientists who should be present at the meetings of the Joint Division (the exact number could be fixed in negotiations with IUGG). This aim might be reached also by the appointment of National Representatives. A similar solution could be found for representation of geologists. (Representatives to the Joint Division who are not Titutlar Members of IUPAC are not entitled to travel and subsistence allowance by IUPAC).
- iii) That the Executive Committee of IUPAC be empowered to take appropriate action at its next meeting after having given due consideration to the opinions of the Geochemistry Commission and the Section of Inorganic Chemistry.

Minute 26

REPRESENTATION OF IUPAC IN NEIGHBOUR UNIONS

Taking into consideration the necessity of having a close relation with other Unions in all important fields, it was

resolved:

- i) That Prof. Emeléus or any other person designated by him, shall represent IUPAC at the 12th General Assembly of the International Union of Geodesy and Geophysics which will take place in Helsinki from July 25 - August 6, 1960

- ii) That Prof. Kuhn shall designate an official representative of IUPAC to the 13th General Assembly of the International Scientific Radio Union which will be held in London from 5 - 15 September, 1960.

Minute 27

REPRESENTATIVE OF IUPAC IN SCOR

The Bureau

resolved: That, if ICSU agrees, IUPAC shall have two representatives in SCOR, one being Dr Rakestraw and the other being Prof. Skopintsev of the Academy of Sciences in Moscow.

The Secretary General to act.

(The representation of IUPAC in SCAR was not discussed).

Minute 28

PROGRAMME FOR MONTREAL - XXIst CONFERENCE AND XVIIIth CONGRESS

With the aim to extend to our Canadian Colleagues the maximum of liberty, it was

resolved: to organise the following Symposia

Symposium on Macromolecules in close connection with the Plastics Division

Symposium on High Temperatures

Symposium on Microchemical Techniques

Symposium on Pesticides in connection with Toxicology and Food Additives

Symposium on Wood Chemistry

Prof. Marion and the Secretary General to act.

Minute 29

IUPAC SPONSORSHIP IN 1960

The Bureau

resolved:

- i) To give sponsorship to the Symposium on Geochemistry which will be held in August in Copenhagen, and to transfer the amount of \$ 1000 which had been allocated for 1959 but had not been used. IUPAC will have no obligation to publish the proceedings of this Symposium
- ii) To give co-sponsorship of the Union to the Symposium on Age Determination which will take place in August in Helsinki, without the obligation to publish the proceedings and without subvention
- iii) To give sponsorship of the Union to the Symposium on Plastics which will be held in Turin, without financial support of IUPAC (September)
- iv) To give sponsorship of the Union to the Symposium on Plastics which will take place in Amsterdam, without subvention of IUPAC (October)
- v) To discuss with Dr H. W. Thompson the question of publication of the proceedings of the Symposia in Turin and Amsterdam

The Division on Plastics and High Polymers has given, on its own initiative, the sponsorship of the Union to the Symposium on Plastics which will be held in Turin. This action has put us in an embarrassing situation and we were obliged to write a categorical letter of protest to the President of this Division. A resolution regarding the sponsorship of the Union in general was taken (see Appendix I).

M i n u t e 30

SPONSORSHIP OF IUPAC IN 1961

Following the request received from Dr S. Kirschner, it was

resolved: To give sponsorship of IUPAC to the International Conference on Co-ordination Chemistry which will be held in Detroit in 1961.

M i n u t e 31

SPONSORSHIP OF IUPAC IN 1962

Requests for sponsorship was received from the Belgian National Committee for Chemistry which plans to organise a colloquium on the occasion of the 75th anniversary of its Society.

The Swedish National Committee for Chemistry requested sponsorship for a Congress on Co-ordination Chemistry which will be held from 25 - 29 June, 1962. It was

resolved:

- i) That a sympathetic attitude towards holding these Symposia should be our guidance
- ii) That our Belgian Colleagues should be encouraged to hold a Symposium on a subject which can be chosen after having had the advice of Profs. Emeléus and Erdtman.

Profs. Emeléus, Erdtman and the Secretary General to act.

After having finally received information and a detailed programme concerning the Symposium on Pharmaceutical Products which will be organised at Florence in 1962, and following the advice of the Organic Chemistry Section, it was

resolved:

- iii) To sponsor the Symposium on Pharmaceutical Products (17 - 19 August)
- iv) To publish the proceedings in the Journal "Pure and Applied Chemistry"

Expressing our thanks for the various invitations that have been received, it was

resolved:

- v) To sponsor a Congress on Molecular Spectroscopy in Japan in September, 1962
- vi) To sponsor the Symposium on Natural Products in Prague, at the end of August, 1962
- vii) To ask the Section of Organic Chemistry to get into contact with Prof. Wheeler in order to fix the subject of a colloquium that shall take place in Ireland.

Prof. Erdtman to act.

Minute 32

BUDGET 1960

In addition to the decisions taken for the three Sections of Inorganic, Analytical and Applied Chemistry (see Minute 17), it was

resolved:

- i) To allocate the necessary funds for the meeting of the Section Presidents in the United Kingdom. Prof. Kuhn will act as convener.
- ii) To accept in principle the budget for the administrative expenses, leaving it to the Executive Committee to take the necessary steps (see Appendix J)
- iii) To provide the amount of \$ 2940. - for the Comptes Rendus and \$ 2775. - for the Information Bulletin. (Printing and mailing costs).

Minute 33

BUDGET 1961

It must be mentioned that, in general, all Sections, Divisions and Commissions have the right to meet in a conference year of IUPAC. The Secretary General forewarned the Bureau that the amount of \$ 200,000 would be necessary, if everybody accepted the invitation to Canada. Even with a participation of 60% only, a sum of \$ 120,000 should be made available to cover the travel expenses to Montreal. It was

resolved:

- i) That only those Sections, Divisions and Commissions shall meet in Montreal which will be directly interested in the subjects of the Congress and the presence of which is necessary in Montreal
- ii) That the other Divisions and Commissions, above all those of the Biological Chemistry Section, should meet in Western Europe
- iii) That the Section Presidents shall inform the Secretary General until 1 September at the latest, which Divisions and Commissions must be invited to Montreal
- iv) That in any event, all Presidents, Vice-Presidents and Secretaries of Sections shall be invited to come to Montreal.

Minute 34

RECOMMENDATION OF THE FINANCE COMMITTEE REGARDING ANNUAL SUBVENTIONS RECEIVED FROM MEMBER COUNTRIES

The Council in Munich resolved that the Bureau be authorized to decide upon a new scale of annual contributions of member countries. Subsequently it was

resolved:

- i) That the new scale of annual contributions as proposed by the Finance Committee of IUPAC shall be accepted
- ii) That this increase of annual contributions shall enter into force on January 1, 1961; the date of payment will be extended until the end of 1961.
- iii) That, as pointed out by the Finance Committee, this "substantial increase in the annual subventions of Member Countries should be an essential part of any scheme to enlarge the income of the Union."

Minute 35

ELECTIONS

It was

resolved: To distribute to the Section Presidents the memorandum drafted by the Analytical Chemistry Section. This concerns the procedure of elections which should be followed by all Sections. The memorandum recommended to them to try to find a method of making it analogous and appropriate in their respective Sections.

Moreover, the internal rules in the Physical Chemistry Section stipulating that the elected Vice-President shall become Section President have proved to be very valuable.

Minute 36

SURFACE ACTIVANTS

Since the information received from the two Presidents of the Physical and the Applied Chemistry Sections not being pressing and the necessity of creating a new Division was not convincing, it was

resolved: To postpone action. The problem, however, can be raised again if the two Presidents wish to do so.

Minute 37

PROPOSALS TO MAKE FUTURE CONFERENCES MORE ATTRACTIVE

Even before the Munich meeting, attention was drawn to the fact that the National Delegates from Member Countries might not find the Council meetings very attractive. Profs. Letort and Tiselius were entrusted to study this question and to report back. It was

resolved:

- i) That the attached report (see Appendix K) made by Profs. Letort and Tiselius be accepted
- ii) That a chart and a programme be drafted, showing the possibilities of future activities in Congresses, Symposia, Colloquia, etc., with due consideration of the desirability of limiting monster Congresses.

The Secretary General to act.

Minute 38

MEMORANDUM OF PRESIDENT NOYES

The memorandum sent by President Noyes to all members of the Bureau was discussed. Out of the many problems which have been treated in the memorandum the proposal to strengthen the Sections and to increase their influence was especially considered. Following the recommendation made by the Executive Committee it was unanimously

resolved:

- i) That apart from the Section Presidents, a second representative of the Section, selected by the Section Presidents, should be invited to the next Bureau meeting in Montreal

- ii) That all the questions will be discussed by the officers of the Union and will be brought forward to the next Executive Committee meeting.


M i n u t e 39

NEXT MEETING

The next meeting of the Bureau will be held in Montreal on August 2, 1961, at 9.00 a.m.

N. B. The English version of these Minutes represent the authentic text.

Dr W. Albert Noyes, Jr.
President


Dr Rudolf Morf
Secretary General.

Submitted to the Bureau as a draft kindly inviting the
Bureau Members to give me their comments.

INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY

Report of the Section President on the activity of the Physical Chemistry Section
from August 1959 to May 1960.

A. Meetings and Symposia

The following meetings and symposia, arranged by Commissions of the Physical Chemistry Section have taken place between the Munich Conference (August 1959) and May 15, 1960 :

Commission on Molecular Spectroscopy (President Dr H. W. Thompson)
Commission meeting and symposium at Bologna (Sept. 7-12, 1959). As a result of this and earlier meetings of this Commission reports will be ready within a few months on

Infrared wavelength standards
Presentation of data on optical rotatory dispersion
Terminology on molecular vibrations
Symbols and terminology for infrared and ultraviolet.

Commission on Electrochemistry (President Prof. M. Pourbaix)
A symposium in conjunction with CITCE (affiliated to IUPAC) was held at Vienna (Sept. 29-Oct. 2, 1959).

Commission on Macromolecules (President Sir H. W. Melville)
Commission meeting and symposium at Wiesbaden (Oct. 12-17, 1959)
Reports on this meeting were received from the part of Sir H. Melville and Prof. H. Mark. The items discussed included : rules for nomenclature in German, prepared by Prof. O. Kratky; Russian nomenclature, prepared by Prof. Kargin and reported to be ready by the end of 1959; nomenclature in Japanese reported to be ready end of 1960. Establishment of subcommittee (Desreux, Huggins, Mark, Natta) on nomenclature for stereoregulated polymers. Distribution of a narrow fraction of Polystyrene to various laboratories for comparison of molecular weight determinations.

Joint Commission on Applied Radioactivity (President Dr H. Seligman)
Commission meeting at Paris (Oct. 27, 1959) during which the question of radioactive standards, questions of standard techniques and the organization of future symposia was discussed. In September 1960, a conference is scheduled on the use of radioisotopes in Physical Sciences and Industry.

Bunsen-Kirchhoff Centennial Celebration
Under the auspices of the Deutsche Bunsengesellschaft, the Academy of Heidelberg and the University of Heidelberg a celebration was held, sponsored by IUPAC, in commemoration of the discovery of spectral analysis, 100 years ago by Bunsen and Kirchhoff. IUPAC was represented at the manifestation through Prof. W. Klemm.

B. Special problems

Manual of Physico-chemical Symbols and Terminology (President
Prof. W. Jost)

The manual which has been published in English and French by Butterworths in August 1959, is, according to a communication of Prof. Guerassimow, going to be translated into the Russian language.

Commission on Physico-chemical Data and Standards (President
Dr E. Wichers)

Following personal discussions and correspondence with Dr Wichers, a list of numerical values, including constants like the Avogadro number, the Faraday constant, the charge of the electron, etc. is going to be prepared by the Commission on Physico-chemical Data and Standards.

Systems MKSA-CGS

One of the problems which still need careful consideration from the part of the Physical Chemistry Section and of IUPAC in general is the question of a priority of one of these two systems. It will be remembered that a priority of the MKSA-system is recommended by a number of physicists and engineers and in particular by the ISO/TC 12. Some further development has occurred in this matter through the distribution of an ISO/TC 12 proposal concerning Quantities and Units in Chemistry. (Document 371/E, December 1959). In this proposal the main quantities and units occurring in chemistry are defined and tabulated. It is stated that this table contains for example for the volume-concentration exclusively the definition of moles per cubic metre and for the diffusion constant the definition of $\text{m}^2 \text{sec}^{-1}$. Other units are said to be allowed in a "special remark" in the introduction. The president of the section has written both to Prof. Christiansen, past president, and to Prof. Jost, actual president of the Commission on Physico-chemical Symbols and Terminology; drawing the attention to the necessity that a recommendation to chemists should contain the units which they are actually expected to use and that it would be difficult to persuade chemists to express concentrations in moles per m^3 . Prof. Jost is going to represent IUPAC at a meeting of ISO/TC 12 in Copenhagen from June 26 to July 2, 1960.

Addition made after the Leningrad Bureau-meeting

Prof. Jost sends me by a letter of May 24 a comment of the Deutscher Normenausschuss für Chemie to the above mentioned ISO/TC 12 Proposal concerning Quantities and Units in Chemistry. The remarks of the Deutscher Normenausschuss für Chemie dated February 1960 are similar to those made by myself in the preceding paragraph.

Remark concerning the adoption of Rules by the Council of IUPAC

It would be desirable that the representatives of the member countries were better informed about the nomenclature and other rules which the Council is expected to adopt. The rules prepared by the Commissions should moreover before being finally adopted be presented for comments and criticism directly and personally to the leading scientists of the branch in question.

C. Activities of Commissions and Divisions. Coordination of Activities

- a) Commission on Macromolecules, Section of Physical Chemistry
(Sir H. Melville)

and

Plastics and High Polymer Commission, Section of Applied Chemistry
(Dr G. Dring).

Prof. Dr W. Kern contacted Dr G. Dring at Munich. He reported at Wiesbaden to the Commission on Macromolecules. Observers will be sent of the Physical Chemistry Commission to the meetings of the Applied Chemistry Commission and vice versa. I attended the meeting at Wiesbaden and asked that terms of reference should be specified 1) by Dr G. Dring, 2) by Sir H. Melville. None of these documents were received.

The Commission on Macromolecules and Dr G. Dring emphasized both that an amalgamation of the two commissions was impossible, the existence of the two commission corresponding to the existence of a section on pure (physical) chemistry and applied chemistry. Example : next symposium on plastics treats : Use of Plastics in Automobile Industry.

- b) Commission on Electrochemistry (Prof. Pourbaix) and
Commission on Electrochemical Data of the Section of analytical
Chemistry.

In order to ensure close collaboration Dr R. G. Bates, former president of the Electrochemical Data Commission of the Section of analytical Chemistry is going to be titular member of the Commission on Electrochemistry.

Moreover Drs Delahay, Hickling and Kortüm, titular members of the Commission on Electrochemical Data have been elected associate members of the Commission on Electrochemistry and MM. Hamer, Pourbaix and Valensi, titular members of the Commission on Electrochemistry have become associate members of the Commission on Electrochemical Data.

signed : Prof. W. Kuhn.

INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY

REPORT OF THE PRESIDENT OF THE INORGANIC CHEMISTRY SECTION

The Section of Inorganic Chemistry played a major part in the Conference at Munich in 1959 and it is natural therefore that its activities since that time should have been limited. The Commissions have, however, continued to work smoothly and as the following summary shows.

Dr Wichers has submitted a memorandum on the new Carbon-12 scale of atomic weight and has asked that the views of member countries be made available not later than January, 1961. The proposed new scale will result in a single unified system for use by chemists and physicists. It will be considered by IUPAC at its General Conference in 1960 and, if approved by that body and by the member countries of IUPAC, will be formally presented at the Montreal meeting in 1961. A new table of atomic weights, based on a review of both chemical and physical data, will be available at that time.

The Commission on the Nomenclature of Inorganic Chemistry is considering a report on the nomenclature of boron hydrides, produced by the American Chemical Society. There is also to be a meeting of a joint-inorganic/organic sub-committee on the nomenclature of organometallic compounds. This will be held at Scheveningen in July 1960 and will be attended by Profs. Jensen, Malatesta and Remy and by Dr Chatt. The work of this Commission continues to be outstandingly useful.

The Commission on High Temperatures and Refractories is proposing a symposium on high temperatures as part of the Montreal meeting (1961). The papers presented at this symposium will be included in the programme of the Physical Chemistry Section and discussions are proceeding with the Canadian Organising Committee. A hall to accommodate about 300 people will be available, but, since attendance may be high, steps are being taken to define precisely the aspects of the subject to be continued. It is proposed by Dr Foex, the secretary of the Sub-commission on Condensed States that consideration should be given to the publication of papers given at the Montreal meeting.

Dr Foex has also made a request for the publication of bibliographies compiled by his commission and this has been referred to the first place to Dr H. W. Thompson. A preliminary report on the activities of the Sub-commission on Condensed States and of the Commission on High Temperatures has been received. It is noted that the main activity of these Commissions, other than the organisation of symposia, is the publication of bibliographies, on various aspects of the subject. These appear to be very useful to those concerned.

In connection with the work of the Commission on Geochemistry, a meeting was held in Münster on March 3rd, 1960, to consider certain difficulties which have arisen. These relate to the adequacy of the funds made available to the Commission by IUPAC, the co-operation between the Commission and IUGG, the frequency of meetings organised by the Commission, and the exact scope of its activities. The meeting was attended by Profs. Belcher, Correns, Emeléus and Klemm and by Dr Morf. It was pointed out that the following activities were in accordance with the Statutes of IUPAC.

- i) the publication of tables and lists of geochemical data
- ii) the definition and standardization of geochemical nomenclature
- iii) the standardization and definition of methods of analysis, with a view to evaluating published analytical results.

The sub-committee did not consider that abstracting was a proper activity. The wish of geochemists to form a separate Union or Section was discussed and the meeting was in favour of a new joint-division of Geochemistry, under the auspices of the Section of Inorganic Chemistry of IUPAC. This joint division would also have close links with the Analytical Chemistry Section and, if possible, would have some form of representation of IUGG. The budget proposals of the Section were also discussed in relation to the items approved by the Executive Committee for 1960. This meeting at Münster served a very useful purpose by formulating and clarifying the difficulties of the Commission, though final recommendations cannot be made until the matter has been further discussed by the Bureau.

signed: H. J. Emeléus

INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY

REPORT OF THE PRESIDENT OF THE ORGANIC CHEMISTRY SECTION.

After the Munich meeting there has been considerable correspondence about symposia on the chemistry of medicinal drugs. The Italians have proposed to hold one in Florence in 1962, to be organised by Società Italiana di Scienze Farmaceutiche and the English have proposed to organise a similar meeting in England in 1961.

The Italians have priority and they have now given such economic guarantees that it was felt that they should be given the opportunity to hold their Florence Symposium. The Italians have stated that the economic situation is such that the Symposium would not cost IUPAC anything. As a consequence the English have withdrawn their claim for a similar symposium.

Arrangements have been made for publication of the manuscripts of the Florence Symposium in the IUPAC Journal.

A Symposium on the chemistry of natural products is being planned to be held in Prague in 1962. The present writer plans to attend the International Symposium on the Chemistry of Natural Products in Melbourne, Canberra and Sydney 15 - 25 August, 1960.

The very active and useful Commission on the Nomenclature of Organic Chemistry and the Commission on Codification, Ciphering and Punched Card Techniques have continued their work individually and by correspondence. Their next meeting will take place in Scheweningen, The Hague, July 9 - 16, 1960 jointly with a subcommission on the nomenclature of inorganic chemistry.

A Japanese version of the IUPAC nomenclature rules for organic chemistry has appeared.

It is felt that there is at present a tendency to hold too many symposia for which sponsorship and economic support from IUPAC is claimed and that the planning of such symposia is frequently carried out without due contact with IUPAC at an early stage. This, of course, will sometimes lead to certain conflicts and cause unnecessary irritation to say nothing about the expense for IUPAC. It is also felt that in future, except perhaps in very large countries, big congresses covering the whole or almost the whole of chemistry should be avoided. Smaller, even regional, symposia sponsored by but not, or only partly, supported by IUPAC are certainly to be preferred, especially if much time is reserved for private discussions, the Gordon conferences being useful models. If big congresses are arranged in large countries it will probably be useful to divide them into sections which hold their meetings in different smaller cities. Attention should probably also be paid to the need for contacts with other sciences so that a plenary lecture is given by a representative of a neighbouring science. The "mammoth congresses" with their large banquets and extensive sightseeing programs - during the congress - seems to me to be due to the wish for national manifestations and to the great increase in the number of chemists and in the standard of living in many countries but I feel that they have a tendency to become tourist attractions more than serving the advance of our science.

signed: H. Erdtman

APPENDIX D

INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY
REPORT OF THE PRESIDENT OF THE BIOLOGICAL CHEMISTRY SECTION.

1) The Nomenclature Committee

The President of the Commission on Nomenclature, Dr. W. Klyne, has prepared a report on the Nomenclature of Biochemical substances. This report has been approved by all members of the Commission and has been circulated to the Section. It has also been approved by the British National Committee on Biochemistry. The Secretary General of IUPAC has a copy and the report might advantageously be circulated to some or all Sections of IUPAC, and to the Editors of journals. When finally approved, it should be published in the IUPAC journal "Pure and Applied Chemistry".

The question has arisen as to whether it might be advantageous to invite IUB to set up a small commission on nomenclature of biochemical substances which could hold joint meetings with the IUPAC Nomenclature Commission. Alternatively, the IUPAC Commission on Biochemical Nomenclature might possibly join the corresponding commission of IUB (when set up) as a Joint Commission.

2) Protein Commission

The President of the Protein Commission, Dr K. Bailey, is preparing a report on the work of this Commission which it is hoped will be completed within the present calendar year.

The possibility of holding a Symposium on Proteins or Peptides in 1961 has been explored. In view of the Peptides Symposium being held before or after the Moscow Biochemical Congress, probably in Prague, it seems inadvisable to proceed with any plans for a meeting on Peptides. It has therefore been decided to approach Dr. Peters of Bruges, organiser of previous symposia on Proteins there, to explore the possibility of the Protein Commission joining his Bruges Committee in the planning of a Protein Symposium for April or May of 1961.

If it is possible to make these arrangements, the Section of Biological Chemistry will attempt to arrange its Conference, comprising the meetings of the complete Section including its Commissions, for a few days before or after the Protein Symposium.

3) The Clinical Chemistry Commission

Enzyme units.

A joint sub-commission with the Enzyme Commission of IUB was set up in Vienna in 1958. This met at Starnberg in August 1959. It decided to recommend the expression of enzyme units in terms of millimoles of substrate transformed per minute, as a more scientific and more satisfactory expression of enzyme activity than any of the many different conventions at present in use. This recommendation will be given full publicity and support.

International Standard Samples for Testing Analytical Results.

Arrangements have been made in several countries for analytical control schemes whereby samples of biochemical fluids, e.g. freeze-dried blood plasma, ultrafiltered plasma etc., are made available to hospital laboratories for the checking of their analytical results for contained constituents against the known concentrations of the samples, established by accurate analysis under rigidly controlled conditions.

Drugs and Toxic Substances.

The Commission has arranged for several University and hospital laboratories to test methods already published for the estimation of administered drugs and for toxic substances absorbed by workers in industry, and to investigate and invent new methods where none already exists. Further to study in collaboration with medical colleagues the concentrations at which drugs are effective and at which they become toxic, and the concentration at which industrial substances hazardous to health are toxic in the human organism.

A Congress on Clinical Chemistry has been organised for Edinburgh for the 14 - 19 August, 1960. This will be held under the auspices of the Clinical Chemistry Commission of IUPAC. It is the IVth International Congress so arranged.

A Canadian-American Joint Meeting of Clinical Chemistry will be held in Montreal at the end of August 1960. This is not officially sponsored by the Clinical Chemistry Commission, but has received our encouragement and assistance.

An invitation has been received from the American Association of Clinical Chemists and the Canadian Society of Clinical Chemists for a USA-Canadian Congress in a border city, e.g. Detroit or Windsor (or both) for 1963. It is hoped to make arrangements to accept this invitation.

4) Section Meetings

Joint Negotiating Committee with IUB. A meeting is arranged for Cambridge in September 1960.

The Section.

The President, the Vice-President and the Secretary will attend the IUPAC Conference in Montreal in August 1961.

The full Section plus Commissions hopes to meet in western Europe, e.g. in Bruges (at the time of a Protein Symposium there), in the spring of 1961.

signed: E.J. King

REPORT OF THE PRESIDENT OF THE ANALYTICAL CHEMISTRY SECTION

The Section presented a large number of reports at the Conference at Munich in 1959, hence further activities are still in their initial stages. The 5th report by the Reagents and Reactions Commission on "Inorganic Reactions" is nearly ready and should be available in July. The Report on "Sampling Terms" by the Terminology Commission is now ready and is being circulated to members of the Section Committee.

Because so many Section Reports, some book length, are being held-up by the lack of appearance of the new Journal (it was promised to me personally that the first issue would appear in February) the Section asks for a definite statement on the present position.

A report on the activities of all the Commissions was presented some months ago.

Because my own term of office expires next year the suggestion made at Munich, that the incoming President be named to the Bureau in the preceding year has been followed. A working procedure has been formulated and has been accepted by the Section Committee. It has to be ratified by the Section in 1961. Professor Duyckearts is named as the new President and he will take office immediately after the Montreal Congress.

The Section has agreed to support the Symposium on Micro-techniques being organised by Dr A. Steyermark, Chairman of the Microchemistry Commission and which is to be held at Princeton, after the Montreal Congress. The Section therefore asks for IUPAC patronage.

Great concern has been expressed within the Section at the attitude of the Canadian organisers of the Montreal Congress with regard to the place of Analytical Chemistry in the programme. This began with a letter from Prof. Marion to me suggesting that because of the Steyermark Symposium the Congress programme need not "carry any analytical Chemistry." Bulletin No 10, p. 25, certainly suggests that analytical chemistry should have a one-third share of the programme. So far the Section has never taken part in a combined Conference and Congress. It has only held two meetings both in non-Conference years and it would seem that these were special invitations organised by the host country and the Section.

Finally the Section asks for a ruling on length of service of Section Committee members. The Statutes are obscure on this point and I circulated a memorandum explaining these obscurities over a year ago.

signed: R. Belcher

INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY

Dr J.H. Bushill,
London.

16th May, 1960

Dear Dr. Morf,

In my letter of the 13th April I indicated that a report on the activities of the Divisions of the Applied Chemistry Section would be forwarded to you at a later date. I now have that report and enclose it herewith.

Yours sincerely,

signed: J.H. Bushill.

Enclosure

I U. P. A. C.

REPORT ON THE ACTIVITIES OF THE APPLIED CHEMISTRY SECTION SINCE
MUNICH 1959

1. Fermentation Industries Division

Commission A. (Fusel Oils)

Members of the Commission are continuing their study of fusel oils, special attention being given to the application of gas chromatography for that purpose.

Commission B. (Dried Yeast)

Determination of pantothenic acid in dried yeast is receiving special study by this Commission. In particular the method of liberation of the vitamin has proved somewhat troublesome; enzyme treatment is however giving promising results.

The data collected is expected to be ready for a meeting of the Commission during September in Switzerland.

2. Food Division

Commission on Food Additives

The ad hoc Committee formed to report on Food Additives is now a Commission attached to the Food Division. As such it is intending to meet in London in September to formulate its future programme in view of the Union's agreement to its study of methods of determining Additives in Food.

Commission on Trace Elements in Food

This Commission is finalising its results on methods of determining lead and mercury in food. It is believed that a meeting of the Commission in October may well enable the investigations to be concluded.

3. Oils and Fats Division

The following studies are being actively pursued:-

- i) Solidification curves of fats.
- ii) Determination of water in oils and fats.
- iii) Spectrophotometric determination under U.V. of poly unsaturated acids by two methods.
- iv) Carbonyl index by two methods.
- v) Determination of monoglycerides by two methods.

This Division will be holding its next meeting in Bari (Italy) on October 11th and 12th of this year.

4. Organic Coatings Division

This Division has formed itself into various sub-committees. That concerned with "testing procedures" has compiled a list of practical hand tests for evaluating the hardness of organic coating films. The analytical methods sub-committee is developing certain supplementary contributions to be included with the report of Dr. Petit on "The analysis of alkyd resins". The Chairman of the sub-committee on terminology has prepared a text containing some new views on the problem of translating matters concerning surface coating technology. This is for discussion at a meeting of the Division planned for London during September.

5. Pesticides Division

The activities of this Division have recently been confined to attempting to arrange a convenient time and place for the next International Congress on Pesticides. Formerly, these congresses had the name "International Congresses on Crop Protection" but with the change of name of the Division to Pesticides Division and in view of the fact that so many pesticide problems are common, not only to protection of crops but also to other fields in which pesticides are used, the early change of title was to be justified.

6. Plastics and High Polymers Division

This Division, since last reporting, has held a very successful symposium on "Ageing of Plastics" (Düsseldorf, October 1959) when 1900 people attended.

The various phases of the work programme outlined and discussed at the Düsseldorf meeting have been assigned to members of the Division.

The Document entitled "Classifications of High Polymers : A Review" was published early in 1960 by Butterworths Scientific Publications.

Since the Düsseldorf meeting there has been contact with 24 IUPAC National Adhering Organisations, not previously participating in the work of the Division. Five of these, namely Czechoslovakia, Hungary, Israel, Japan and Spain have designated National Representatives. Furthermore, responses indicate that nominations are under consideration from several other countries.

The next meeting is to be held in Turin, Italy, in September 1960 in conjunction with the meeting of the Congresso Internazionale Della Materie Plastiche. The possibility of holding a symposium, jointly sponsored by the Division and the organisers of the afore mentioned Congress is under consideration. Contacts have also been made with the organising committee for the 1961 IUPAC Congress in Canada concerning the possible cooperation by the Division in sessions on plastics and high polymers as part of the scientific programme of the Congress, or as a separate symposium.

7. Pulp, Paper & Board Division

A list of national and international scientific and technical meetings in the field of this Division's work has been circularised to members of the Division. The Division is planning a symposium on Wood Chemistry for the 1961 meeting of IUPAC in Montreal. The programme committee has been set up and is actually preparing a programme at the present time.

The leading periodicals in the field in Sweden (Svensk Papperstidning), the United States of America (Tappi) and most recently Germany (Das Papier) now follow the rules prepared by the Division for publication and state this fact on the heading on their periodicals.

The Commission on Cellulose Analysis has been active and will soon have for publication methods for the determination of "Alkali-solubility of pulp" and "Alkali resistance of pulp".

8- Toxicology and Industrial Hygiene

The work of the Division has been continued by correspondence : discussions are in progress to establish a programme dealing with the application of the analysis of biological materials to the control of human exposure to toxic substances.

A first collection of 21 analytical methods for the determination of toxic substances in air (together with an introduction) has been published by Butterworths Scientific Publications. About nine new methods are now being edited for publication.

9. Water, Sewage and Industrial Wastes

Now that the report on "The re-use of water in Industry"(a contribution to the solution of the effluent problem) is in the press, the Division is planning a meeting in England when problems arising from the use of synthetic detergents, and the treatment of the waste waters of the fermentation industries will be discussed.

signed: J.H. Bushill

INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY

Project submitted to the Bureau for discussion regarding the possibility of a
reorganisation of the Applied Chemistry Section.

The rapid development of the chemical industry will have serious effects on the structure of the Applied Chemistry Section, as can be seen from the tendency to create new Divisions and Commissions. Apart from the financial consequences of such a wide development, it is feared that this Section might become a hydra. In Munich it was decided to maintain only those Divisions and Commissions which can justify their existence by submitting a working programme that will have to be accepted by the Council in Montreal in 1961.

The Bureau expressed the wish that the Applied Chemistry Section be reorganised in such a way as to arrest the present dangerous growth of this Section. However, if draconian regulations were resorted to, it is obvious that all these organisms - now closely affiliated to IUPAC - would become autonomous by creating new international unions, and IUPAC would then be in a difficult situation. Also, it would be regrettable to have a separation between Pure Chemistry and Applied Chemistry.

All Sections and all branches of theoretical chemistry having a close connection with their application in industry, it would be desirable to find out whether a better concentration of efforts and means could be realised by a reduction of the Applied Chemistry Section, e.g., The Physical Chemistry Section could take care of plastics ; fermentation (and its industrial application) would come under the Biological Chemistry Section ; all analyses (scientific as well as applied) could be treated by the Analytical Chemistry Section; all questions of nomenclature, symbols and samples could be considered by the Physical, the Inorganic and the Organic Chemistry Sections respectively.

Such a reorganisation could have as a consequence a concentration of efforts and a limitation in the number of Divisions and Commissions, resulting in considerable economies.

It is obvious that this memorandum does not claim to provide a solution, but, as its name indicates, it will serve as a basis for discussion.

24th May, 1960

(submitted to the Bureau by the Executive Committee as a draft)

MINUTES

(of the meeting held in Münster/Westf., on 3rd March, 1960.)

Chairman:	Prof. W. Klemm
Present:	Prof. R. Belcher
	Prof. C.W. Correns
	Prof. H.J. Emeléus
	Dr. R. Morf

Item 1

Purpose of the meeting:

This meeting was arranged to discuss certain difficulties, which are summarised below.

The Commission on Geochemistry has expressed its fear that IUPAC is not sufficiently interested in the problems of Geochemistry. Also, in the opinion of several geochemists, IUPAC does not allocate enough money to their Commission and neglects mentioning the reports of geochemistry in the Comptes Rendus. As a matter of fact, the Secretary General has received the first report on the activity of geochemistry in autumn 1959. Some misunderstandings in the past two years have helped to render this an almost insoluble situation.

On the other hand, IUPAC is of the opinion that the Commission on Geochemistry is willing to receive subventions from IUPAC for symposia, meetings and administrative expenses, while, at the same time, it seems to be inclined to think of an approach to IUGG.

After taking into careful consideration the special interests of geochemistry, IUPAC was not convinced that there exists the necessity of organizing a meeting on geochemistry each year. (1957: Symposium in Paris, 1958: meeting of the Commission in Oxford, 1959: meeting of the Commission in Munich, 1960: meeting of the Commission and Symposium in Copenhagen, 1960: meeting in Helsinki in co-operation with IUGG.)

Following the statutes and rules, and according to general instructions given to the Commissions (draft made by Prof. W. Kuhn and Dr. R. Morf), IUPAC has the task of sponsoring work which presupposes co-operation on an international level, whereas normal scientific research should be carried out by individuals exclusively.

I t e m 2

The report and the minutes of the Geochemistry Commission meetings held in Munich on 26th and 27th August, 1959, were studied and discussed carefully. The items

- ii) the publication of tables and lists of geochemical data, including rock and mineral analyses;
- iii) the definition and standardization of geochemical nomenclature;
- v) the standardization and definition of methods of analysis with a view to evaluation published analytical results;

on page 1 of the working programme were welcomed and supported as being in accordance with the statutes of IUPAC, while the other items were thought not to be within the scope of IUPAC.

I t e m 3

The wish of the geochemists, to form a Union or Section, was discussed. However, the statutes of ICSU and IUPAC do not allow such an organism. In view of the special concern which the Commission has in the field of geochemistry and the complexity of its tasks, it seems necessary that it should seek close co-operation within IUPAC with the Physical, the Inorganic, the Analytical and the Applied Chemistry Sections. A close collaboration of geophysicists and geologists is of the same urgency. Without great administrative costs, such a co-operation can be realised by forming a Joint-Division of Geochemistry, under the auspices of the Section of Inorganic Chemistry of IUPAC. It is proposed that this Joint-Division of Geochemistry be allowed to form and maintain commissions and sub-commissions. If these newly established commissions and sub-commissions need monetary subventions, the Bureau and the Council of IUPAC will have to approve in advance the exact working programme, which should also mention the duration of the work and the appointments contemplated.

It was also considered that the above mentioned collaboration within IUPAC would be best guaranteed by appointing representatives of the different Sections in the Joint-Division or its commissions, either as Titular Members or as Observers.

The geophysicists (IUGG) might make their contributions by nominating 2 or 3 scientists who should be present at the meetings of the Joint-Division (the exact number could be fixed in negotiations with IUGG). This aim could be reached also by the appointment of National Representatives. A similar solution could be found for representation of geologists. (Representatives to the Joint-Division who are not Titular Members of IUPAC are not entitled to travel and subsistence allowance by IUPAC.)

Item 4

Future activities:

Taking into consideration the general wish and the necessity to reduce the increasing number of international meetings, the proposal has been made, to establish a working programme for Geochemistry that will not involve a symposium or meeting each year. It would be desirable that sooner or later, the Division on Geochemistry would organise a similar rotation to IUPAC, that is to say, to hold meetings only every two years.

Item 5

Budget:

The total income from annual subventions which are granted to IUPAC by the Adhering Member Countries, amounts to \$ 27,000. This amount must primarily be used to reimburse travel and subsistence expenses to Titular Members (General Assemblies of the Union.) Up to now, the total administrative costs of IUPAC have not exceeded a few thousand dollars.

In a petition, the Commission on Geochemistry has demanded the amount of \$ 9500 for 1960. It is not possible for IUPAC to pay this amount. The Executive Committee, after having consulted all Section Presidents, has approved the following items for 1960:

- i) Symposium in Copenhagen, \$ 1000 (transfer of the amount granted for the meeting in Göttingen in 1959).
- ii) Reimbursement of travel and subsistence for the meeting of the Commission in Copenhagen, \$ 2620.
- iii) The amount of \$ 1000 for the Symposium in Helsinki on Age Determination of Minerals etc., which is taken from the contributions of the Commission on Applied Radioactivity.

It is not possible, as a matter of principle, for Commission Members to be reimbursed for two journeys in the same year. This is a guiding principle for all Commission activities. Administrative costs of the Geochemistry Commission, which have been particularly high (\$ 500 a year) because of the unusual situation in Helsinki, should be kept as low as possible. A simple multiplication of the amounts claimed by the Geochemistry Commission shows very clearly that it would be financially impossible to treat all other Commissions of IUPAC in the same generous way, as has been the case with the Geochemistry Commission.

Prof. Correns will discuss this matter with Prof. Ingerson, and he will report back to the Executive Committee. (It must be pointed out that IUPAC comprises 6 Sections with more than 50 Commissions. Each Commission has the right to be treated in the same way as the Geochemistry Commission.)

Item 6

Publication:

The contract of IUPAC with its official publishers provides that all the reports and papers issuing from a symposium, are published through the Editorial Board of IUPAC. Therefore, it will be necessary that all the reports and papers of the Symposium and the meeting of the Commission held in Copenhagen and the Symposium held in Helsinki should be offered for publication to IUPAC. The Editorial Board will decide whether IUPAC will publish these reports and papers or not. As to the expenses, the Commission will not have to pay for the publications, nor will it be concerned with the actual processes of publication provided that the IUPAC Editorial Board assumes the duty to publish. Each of the members of the Geochemistry Commission will receive a copy of it, free of charge.

Item 7

It is proposed that the Joint-Division should be autonomous; only in its dealings with other Unions and other Organizations, as well as in all financial questions, it will have to seek the approval of the Bureau of IUPAC through the Section President of the Inorganic Chemistry Section.

Item 8 The above are draft minutes of the meeting held in Münster:

It is clearly understood that if the Geochemistry Commission will agree to whatever change in its position, this change has to be accepted by the Sections involved; a final decision will be made by the Bureau and by the Council of IUPAC.

Dr. Rudolf Morf


Secretary General.

20th April, 1960

INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY

Resolution concerning publications to be voted by the
Bureau - subject to its clearing with Dr H. W. Thompson

The sponsorship of the International Union of Pure and Applied Chemistry may be given by the Executive Committee to a Symposium, etc., provided that the Symposium has been approved by the appropriate Section as regards its scope and nature.

The question of publications of any such Symposium shall be considered by the Editorial Advisory Board. If this Committee decides not to publish the Symposium in the Journal "Pure and Applied Chemistry" of the Union, and if the organisers of the Symposium nevertheless wish to publish the papers presented, this should be their responsibility.

INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY
FINAL BUDGET FOR 1960

approved by the Bureau in Leningrad on Thursday 26th May, 1960.

PHYSICAL CHEMISTRY SECTION	\$	\$
<u>Commissions</u>		
Physico-Chemicals Symbols and Terminology	1.500	
Chemical Thermodynamics (Thermodynamical Bulletin)	250	
Molecular Structure and Spectroscopy	1.850	
Administration	<u>220</u>	3.820
INORGANIC CHEMISTRY SECTION		
<u>Commissions</u>		
Nomenclature	500	
Geochemistry (Ingerson is listed under "IUPAC representatives IUGG symposium-Helsinki)	4.149	
<u>Symposium</u>		
Geochemistry (transferred from 1959)	1.000	
IUPAC representatives to IUGG symposium-Helsinki	1.547	
Administration	<u>600</u>	7.796
ORGANIC CHEMISTRY SECTION		
Section Committee	200	
<u>Commissions</u>		
Nomenclature	2.000	
Codification, Ciphering and Punched Card Techniques	1.100	
<u>Symposium</u>		
Australia - Chemistry of Natural Products	5.000	
Travel expenses for Prof. H. Erdtman	<u>1.265</u>	9.565
BIOLOGICAL CHEMISTRY SECTION		
<u>Commissions</u>		
Nomenclature (Steroids - Basle)	1.000	
Clinical Chemistry	1.300	
<u>Symposium</u>		
Clinical Chemistry - Edinburgh	2.000	
Administration	<u>500</u>	4.800
ANALYTICAL CHEMISTRY SECTION		
Administration	<u>1.500</u>	1.500

APPLIED CHEMISTRY SECTION

	\$	£
<u>Divisions</u>		
Water, Sewage and Industrial Wastes	800	
Pulp, Paper and Board	1,000	
Oils and Fats	800	
Food Additives	940	
Trace Elements in Food	500	
Fermentation	1,400	
Administration	<u>600</u>	6.040
Meeting in Germany (Klemm, Correns, Emeléus)		600
Publications (Butterworths)	5,260	
Editorial Board	2,000	
Editor	<u>1,125</u>	9.390
Bureau meeting - Leningrad	9,548	
Executive Committee meeting - Madrid	2,022	
Section Presidents meeting - London	361	
Verkade Working Committee - Basle	<u>204</u>	12.135
Administrative and travel expenses President Noyes	1,360	
Administrative expenses Honorary Treasurer	1,244	
Administrative and travel expenses General Secretariat :		
Clerical assistance (2 secretaries)	5,300	
Pension fund Mme Avanthay	2,525	
Stationery, stencils, office material	2,620	
Postage fees	1,715	
Cables	85	
Phone calls	100	
Travels of the Secretary General	1,110	
Office premises	930	
Technical services, printing	155	
Photocopies	63	
Translations	<u>465</u>	15.068
Comptes Rendus (printing and mailing costs)	2,940	
Information Bulletin (printing and mailing costs)	<u>2,775</u>	5.715
Contribution to ICSU (2 %)		<u>600</u>
Grand total		78.636 =====
Meeting Joint Commission on Applied Radioactivity Copenhagen	3,337	
Meeting Working Committee on Applied Radioactivity Vienna	<u>1,811</u>	5.148 *

*subject to reimbursement by ICSU

INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY

Means and way to interest National Delegates more profoundly in IUPAC
Conferences.

The decision to have a conference of the Union separated from the congress organised under the auspices of the inviting country, proved to be good. However, under these conditions, the National Delegates have to stay in the town where the conference and the congress will take place, without having any occupation other than being present at two meetings of the Council. These ordinarily take place at intervals of some days, i. e. at the beginning and at the end of a conference. The question arises as to how a more substantial timetable could be planned for National Delegates in order to interest them more profoundly in the affairs of the Union.

The following suggestions have been made with the aim of resolving this question:

1. That it be recommended to member countries to nominate such National Delegates who already are acquainted with the affairs of the Union.
2. That a calendar of a conference should be established in such a way that the meetings of the Council are held at very short intervals; an extreme solution would be to hold only one Council meeting.
3. That, without competition with the congress and in agreement with the organisers of the congress, a prominent scientist should be invited in order to hold a special lecture for the National Delegates on a general subject having actuality and its consequential effects on the work of the Union.
4. That a lecture of one member of IUPAC should be organised in the presence of the Section Presidents and with the aim of drawing the attention of National Delegates to the remarkable features of the Union : its aims, its means, its problems and achievements. It would be desirable if each Section President could have the possibility, if he so wished, to take the floor and to treat with the particular problems of his Section.
5. That those National Delegates who are interested in attending meetings of Commissions which treat problems related to their own fields of interest should be authorized to participate.
6. That the inviting country should be advised to organise some visits to universities, institutes, research laboratories, industrial works, etc.