Glasgow, Scotland 5-6 August 2009

Minutes

1. Introductory Remarks and Finalization of Agenda

Prof. Jin welcomed the delegates to the 45th IUPAC Council meeting. He thanked the Royal Society of Chemistry for its hospitality and the excellent arrangements.

Prof. Jin asked for a moment of silence for IUPAC Colleagues deceased since Council met at Beijing.

Prof Jin noted the letter in the Agenda Book describing the necessary actions for the Council. He then noted the Guidelines for Discussion and the voting procedures in the Agenda Book.

Prof. Henry introduced Prof. Kuroda, ICSU Vice President for External Relations, who brought greetings from ICSU and gave a brief overview of the ICSU.

There were no additions or changes proposed to the Agenda. The Agenda was approved unanimously.

2. Approval of Minutes of 44th Council Meeting and Matters Arising

Prof. Jin asked if there were any corrections or matters arising not covered elsewhere in the Agenda. The motion below was moved and seconded and was approved unanimously by a show of hands (eligible delegates) as is appropriate for a non-scientific matter provided there is no controversy.

Motion: *Minutes of 44th Council Meeting are approved.*

3. Ratification of Decisions Taken by Bureau and Executive Committee since 44th General Assembly

All decisions taken by the Bureau and Executive Committee, since those approved by the Council at Torino (Minute 3, 44th Meeting), are contained in the following Minutes, which were distributed to National Adhering Organizations on the dates shown:

84 th Bureau (Torino, Italy, 8-9 August 2007)	30 October 2007
85 th Bureau (Torino, Italy, 12 August 2007)	30 October 2007
86 th Bureau (Istanbul, Turkey, 29 March 2008)	5 June 2008
87 th Bureau (Bratislava, Slovakia, 18-19 April 2009)	1 July 2009
135 th Executive Committee (Torino, Italy, 12 August 2007)	30 October 2007
136 th Executive Committee (Helsinki, Finland, 10-11 November 2007)	30 January 2008
137 th Executive Committee (Istanbul, Turkey, 30 March 2008)	30 June 2008
138 th Executive Committee (Jeju, Korea, 18 October 2008)	28 January 2009
139 th Executive Committee (Bratislava, Slovakia, 19 April 2009)	1 July 2009

The motion below was moved and seconded and was approved unanimously by a show of hands (eligible delegates) as is appropriate for a non-scientific matter provided there is no controversy.

Motion: Council ratifies all decisions taken by the Bureau and Executive Committee, since those approved by the Council at Torino (Minute 3, 44th Meeting).

4. Announcement of Nominations for Union Officers and Bureau Members

Prof. Black noted that biographies of the nominees were available online and in printed form at the meeting. He informed the delegates that the voting order would be Vice President and then Elected Bureau Members. He then reviewed the situation for each office. He reported that the Bureau had set the number of Elected Members at ten, the same as for the current biennium. The nominations received are given below.

Nominations Received

Vice President

Prof. Srinivasan Chandrasekaran (India)

Prof. Kazuyuki Tatsumi (Japan)

Elected Members of the Bureau (Six minimum)

Prof. Maria C.E. van Dam-Mieras (Netherlands)

Mr. Colin Humphris (UK)

Prof. Stanislaw Penczek (Poland)

Prof. Elsa Reichmanis (USA)

Prof. Itamar Willner (Israel)

Prof. Qi-Feng Zhou (China/Beijing)

5. Announcement of Time of Elections

Prof. Black announced that the elections for Vice President, and Elected Members of the Bureau would be held at 9:30 on 6 August 2009. He then announced that the proposed tellers were Dr. Meyers, Dr. Fedotov and Prof. Templeton.

The motion below was moved and seconded and was approved unanimously by a show of hands (eligible delegates) as is appropriate for a non-scientific matter provided there is no controversy.

Motion: Council approves the appointment of Dr. Meyers, Dr. Fedotov and Prof. Templeton as tellers.

6. Statutory Report of President on State of the Union

Prof. Jin gave a brief overview of his written report. The report is available on the IUPAC web site at < http://www.iupac.org/symposia/conferences/ga09/council_agenda.html>.

7. Vice President's Critical Assessment

Prof. Moreau gave a brief overview of her written report. The report is available on the IUPAC web site at <

http://www.iupac.org/symposia/conferences/ga09/council_agenda.html>

8. Report of Secretary General

Prof. Black gave a brief overview of his written report. The report is available on the IUPAC web site at < http://www.iupac.org/symposia/conferences/ga09/council_agenda.html>.

9. Applications for National Adhering Organization Status

Prof. Black reported that six organizations had applied for NAO status. These are listed below. In addition, the Academy of Science of Moldova had expressed its intention to apply, however they did not provide a complete application and the Bureau recommended that their application not be approved. Three of the applicant organizations were granted Provisional National Adhering Organization status by the Executive Committee and paid their 2009 National Subscriptions. Under the terms of the Provisional Membership they were able to vote at Council once Council approved their application. The three organizations are those from Malaysia, Sri Lanka, and Thailand.

The following motion was approved unanimously.

Motion 1: Council approves the application of the Institute of Chemistry Ceylon, National Research Fund Luxembourg, Institut Kimia Malaysia, Saudi Chemical Society, Chemical Society of Thailand, and the Société Chimique de Tunisie to become IUPAC National Adhering Organizations. This approval is subject to payment of the 2010 National Subscription by the applicant organization.

The following motion was approved unanimously.

Motion 2: Council does not approve the application of the Academy of Science of Moldova for National. Adhering Organization status as their application is incomplete.

10. Plans for International Year of Chemistry in 2011

Prof. Black recalled that in 2007, the IUPAC Council unanimously endorsed the plan to obtain the proclamation of 2011 as the International Year of Chemistry from the United nations General Assembly. Less than a year later, UNESCO's Executive Board recommended the adoption of a resolution to that effect and agreed to support efforts leading the UN General Assembly to declare 2011 the International Year of Chemistry. On 19 December 2008, the 63rd Session of the UN General Assembly took the decision to proclaim 2011 as the International Year of Chemistry. The resolution was brought forward by Ethiopia, with the formal sponsorship of over 35 countries and the support of many more. Dr. Meyers then reviewed the current status of the IYC web site for the Council. Prof. Henry noted that a report on the discussions of the World Chemistry Leadership meeting, which had as its topic the International Year of Chemistry, would be provided later in the Agenda.

11. Report of Committee on Revision of Statutes and Bylaws

Prof. Black noted that the proposed changes in the Statutes and Bylaws had been circulated to the NAOs in advance of the meeting and a copy was provided in the Agenda Book. He informed the Council that voting would be by cards and that two thirds of the votes assigned were required to approve Statutes (S14.3). A vote was taken on the motion below, with 144 votes in favor, more than two thirds of the 157 assigned votes and the motion therefore passed.

Motion: Council approves the revised Statutes and Bylaws.

12. Adoption of Recommendations on Nomenclature and Symbols

Prof. Black referred the Delegates to the list of published Recommendations in the Agenda book. The motion below was approved unanimously.

Motion: Council approves the recommendations approved by the Interdivisional Committee on Terminology, Nomenclature and Symbols and published, or scheduled to be published, in Pure and Applied Chemistry from November 2007 through July 2009.

13. Reports of Division Presidents

The reports of the Division Presidents were taken as read. There were no comments or discussion.

14. Reports of Standing Committee Chairs

The reports of the Standing Committee Chairs were taken as read. There were no comments or discussion.

15. Financial Reports

15.1. Biennial Report of Treasurer

Prof. Corish in his report noted that despite the current very difficult worldwide financial climate IUPAC had held the values of its income streams during the past biennium and had maintained its full range of activities. This was despite a diminution in the overall value of its portfolio the income of which consists of both dividends and interest and gains and losses on the values of the investments. He also reported on the continued growth and success of the project system, on the development of the Strategic Opportunities Fund and on the challenge, and more importantly, on the strategic opportunity provided by the International Year of Chemistry in 2011. He commented that the need still very much exists for IUPAC to diversify and increase its income streams to provide for its future activities.

Prof. De Bièvre thanked the Treasurer for the good work of both himself and the Finance Committee. He then asked if the Union had Euro denominated investments. Prof. Corish replied that the Union had investments in European equities as well as bonds denominated in Euros. In addition the Union conducted some of its business using a Euro checking account.

15.2. Report of Finance Committee

Prof. Corish noted in his report that the conservative investment policy pursued by the Finance Committee had served IUPAC very well during the recent turmoil in the world's markets. It both ensured the continuation of the investment stream of income and rendered the losses due to the collapse in the value of equities much less than it might otherwise have been. Nonetheless there was a decrease in the overall value of our assets: detailed figures for this are available in the report. In accordance with policy the proceeds of the sale of a number of bonds that matured were used to purchase new bonds to maintain the income stream. In addition the Finance

Committee initiated a detailed analysis of the equities held to ascertain the exact nature of the funds and to determine the best options for their future.

15.3. Accounts for 2007-2008

Prof. Corish noted that the Agenda Book contained the audited financial statements for 2007 and 2008. The operations of the Union for the biennium were within budget and, other than the decrease in the value of the investment portfolio, the statements show no areas of concern.

15.4. Appointment of Auditors for 2009 and 2010

Prof. Corish reported that the Bureau had recommended to Council the appointment of Batchelor, Tillery and Roberts, LLP, of Raleigh, North Carolina USA as IUPAC Auditors for 2009 and 2010. The motion below was unanimously approved by Council.

Motion: Council approves the appointment of Batchelor, Tillery and Roberts, LLP, of Raleigh, North Carolina USA as IUPAC Auditors for 2009 and 2010.

16. Budget Proposal

16.1. Proposed Budget for 2010-11

Prof. Corish noted that the revised timetable of meetings in the Union allows the Finance Committee to advise the Executive Committee and Bureau on the budget for the next biennium and the budget here proposed for 2010-11 has been framed following this procedure. He commented that the major changes from the 2008-9 budget are the increase in total National Subscriptions by 3 % in 2010 & 2011 along with increases in most Division Committee allocations, some Standing Committees, and a reduction in the allocation to the Strategic Opportunities Fund. The reduction in the Strategic Opportunities Fund is justifiable as the fund has steadily increased and is now at USD 156 100 as unspent funds from abandoned and completed projects continue to be added. The Secretariat line item has been increased to provide for the overlap with the new Executive Director in 2010.

16.2. National Subscriptions for 2010-11

Prof. Corish noted that the Agenda Book includes a table showing the calculated 2010-2011 National Subscriptions. The table also contains historical data to put the calculated National Subscriptions in perspective. He pointed out that the candidate NAOs, Luxembourg, Malaysia, Saudi Arabia, Sri Lanka, Thailand, and Tunisia, are not included. The major changes are of two sorts. Large changes in the USD amounts are mainly due to changes in the chemical turnover in a country, thus the large increase in National Subscription for China is due to the steady, large increases in the Chemical Turnover each year for the past decade. In other cases the change in National Subscription is due to changes in the exchange rate versus that used in 2007 to calculate the 2008-9 National Subscriptions. The Euro zone countries show little change since the EUR/USD exchange rate has gone back down to what it was two years ago. The National Subscription for Japan is dramatically lower because the Yen rate is much lower than it was two years ago. Conversely Hungary & South Africa

show the effects of a higher exchange rate for the Forint & the Rand. Please recall that the National Subscriptions are set by calculation. The only variable that is under control of Council is the Total National Subscription. The individual National Subscriptions are influenced much more by changes in chemical turnover and exchange rates than by the Total National Subscription.

The motion below was voted on by cards with all voting in favor. The proposed budget and the National Subscriptions that arise from its implementation were therefore approved.

Motion: Council approves the proposed budget for 2010-11 and the National Subscriptions implied by the proposed Budget.

17. National Adhering Organizations in Arrears

Prof. Black reported that the National Academy of Sciences of Belarus had not paid its National Subscription since Council at Beijing admitted it as an NAO in 2005. Council voted on the motion below. Voting was by cards with all voting in favor.

Motion: The National Adhering Organization status of the National Academy of Sciences of Belarus is terminated as of 31 December 2009 unless payment in full is received of the National Subscriptions for 2006 through 2009 before 31 December 2009.

18. Applications for Associated Organization Status

Prof. Black reported that the International Chemistry Olympiad and the Federation of African Societies of Chemistry has applied for Associated Organization Status. Their application materials were in the Agenda book. Council voted on the motion below. Voting was by show of hands with all voting in favor.

Motion: Council approves the application of the International Chemistry Olympiad and the Federation of African Societies of Chemistry for Associated Organization status

19. Termination of African Association for Pure and Applied Chemistry as an Associated Organization

Prof. Black reported that the African Association for Pure and Applied Chemistry had not paid its Associated Organization fees for 2004 and onwards. In addition, repeated attempts at communication have not received a response. Council voted on the motion below. Voting was by show of hands with all voting in favor.

Motion: Council approves the termination of the Associated Organization status of the African Association for Pure and Applied Chemistry

20. Proposals Formally Received from National Adhering Organizations

Prof. Black reported that no proposals had been received from National Adhering Organizations.

21. Organizational Changes in Existing IUPAC Bodies, Proposals for New and Reconstituted Bodies/Terms of Reference

Prof. Black reported that there were no proposed organizational changes in existing IUPAC Bodies or proposals for new and reconstituted Bodies/Terms of Reference.

21.1. New Division Rules

Prof. Black reported that the new Division Rules for the Chemistry and Environment and the Chemistry and Human Health Divisions were given in the Agenda Book. Council voted on the motion below. Voting was by show of hands with all voting in favor.

Motion: The Division Rules of the Chemistry and Environment and the Chemistry and Human Health Divisions are approved.

22. Election of Union Officers and Bureau Members and Approval of Elected Officers of Divisions

The elections for Vice President and Bureau Members were held as announced earlier, at 9:00 on Thursday, 6 August 2009. There were 70 votes for Prof. Chandrasekaran, 83 votes for Prof. Tatsumi and 10 votes either absent or abstain. Prof. Tatsumi was therefore elected Vice Present. Each candidate for Bureau received 136 votes and the six candidates were therefore elected. The successful candidates were:

Prof. Maria C.E. van Dam–Mieras (Netherlands)

Mr. Colin Humphris (UK)

Prof. Stanislaw Penczek (Poland)

Prof. Elsa Reichmanis (USA)

Prof. Itamar Willner (Israel)

Prof. Qi-Feng Zhou (China/Beijing)

Prof. Black presented the officers of the eight Divisions and asked for a vote of approval of the officers for each Division as they were presented. All the Division officers were approved without dissent. They are listed below. The names of officers continuing their current terms of office are included for completeness.

Physical and Biophysical Chemistry Division

President: A. J. McQuillan (New Zealand)

Vice President: K. Yamanouchi (Japan) Secretary: R. Marquardt (France)

Inorganic Chemistry Division

President: K. Tatsumi (continues, Japan)
Vice President: R. D. Loss (continues, Australia)
Secretary: L. V. Interrante (continues, US)

Note: With the election of Prof. Tatsumi as IUPAC Vice President, Prof. Loss becomes Division President and an election will be held for a new Division Vice President.

Organic and Biomolecular Chemistry Division President: G. J. Koomen (Netherlands)

Vice President: K. N. Ganesh (India)

Secretary: M. J. Garson (continues, Australia)

Polymer Division

President: C. K. Ober (continues, US)

Vice President: M. Buback (continues, Germany) Secretary: M. Hess (continues, Germany)

Analytical Chemistry Division

President: A. Fajgelj (continues, Slovenia)

Vice President: M. F. Camões (Portugal)

Secretary: D. B. Hibbert (continues, Australia)

Chemistry and the Environment Division
President: N. Senesi (continues, Italy)
Vice President: L. McConnell (United States)

Secretary: W. J. G. M. Peijnenburg (continues, Netherlands)

Chemistry and Human Health Division

President: D. M. Templeton (continues, Canada)

Vice President: F. Pontet (France)

Secretary: M. Schwenk (Germany) correction made after Council meeting

Chemical Nomenclature and Structure Representation Division

President: R. M. Hartshorn (New Zealand)

Vice President: None for 2010-11

Secretary: T. Damhus (continues, Denmark)

23. Plans for 46th General Assembly and 43rd Congress (San Juan, 2011)

Prof. Lamba reviewed plans for the 2011 Congress and General Assembly noting especially the plans to celebrate the Year of Chemistry. The delegate from Kuwait commented that the dates of the Congress and General Assembly overlapped with Ramadan and suggested that the dates be changed. Prof. Lamba replied that this would be investigated but it would be difficult to change the dates as the contract with the Conference Center had been signed.

24. Approval of Dates and Sites of 47th General Assembly and 44th Congress (2013)

[For Information and Decision; show of hands]

Prof. Black noted that a proposal had been received from the Turkish Chemical Society to host the General Assembly and Congress in 2013. The Executive Director visited the proposed venue and determined that the proposed facilities were suitable. Prof. Ayse Zehra Aroguz and Prof. Caner Zambak then presented the proposal from Turkey.

A motion was moved and seconded to accept the proposal from the Turkish Chemical Society to host the 2013 General Assembly and Congress. The motion was unanimously approved by a show of hands.

25. Approval of Dates and Sites of 48th General Assembly and 45th Congress (2015)

Prof. Black recalled that at its meeting at Istanbul, 29 March 2008, the Bureau approved a motion (Item 10.20) to increase the time for approval of a proposal to host the Congress/General Assembly from four years to six.

Prof. Black reported that a proposal has been received from the Korean Chemical Society to host the General Assembly and Congress in 2015. The Executive Director visited the proposed venue and determined that the proposed facilities were suitable. Prof. Myung-Soo Kim presented the proposal from Korea.

A motion was moved and seconded to accept the proposal from the Korean Chemical Society to host the 2015 General Assembly and Congress. The motion was unanimously approved by a show of hands.

26. Reauthorization of Commissions.

Prof. Black noted that Bylaw 4.302 requires that Council reapprove all existing Commissions at each General Assembly. Council then voted on the motion below. The motion was unanimously approved by a show of hands.

Motion: Council is asked to reauthorize the Commission on Physicochemical Symbols, Terminology and Units and the Commission on Isotopic Abundances and Atomic Weights, and the IUBMB-IUPAC Joint Commission on Biochemical Nomenclature (JCBN).

27. Approval of English as the Official Language of IUPAC

Prof. Black noted that Statute 5.405 requires Council "to determine every four years, beginning in 1963, the one language in which the official records of the meetings of the Council, Bureau, and Executive Committee shall be kept and published;"

The Bureau proposed that the official language of IUPAC continues to be English.

Council then voted on the motion below. The motion was unanimously approved by a show of hands.

Motion: The one language in which the official records of the meetings of the Council, Bureau, and Executive Committee shall be kept and published will be English for the period 2010-13.

28. Important Matters Referred to Council by the Bureau at the 45th General Assembly not Covered by Items on Council Agenda

Prof. Black reported that there were no important matters referred to Council by the Bureau.

29. Reports from Round Table Discussions

Prof. Black noted that each of the four Round Tables had addressed one of the goals of the International Year of Chemistry. The discussion leaders for each group then presented a summary of the discussion. Copies of these presentations are on the IUPAC web site at < http://www.iupac.org/symposia/conferences/ga09/RoundTables.html>

Topic A: Increase the public appreciation and understanding of chemistry.

Chair: Anders Kallner

Topic B: Increase interest of young people in chemistry.

Chair: Javier Garcia-Martinez

Topic C: Generate enthusiasm for the creative future of chemistry.

Chair: Natalia Tarasova

Topic D: Celebrate the role of women in chemistry or major historical events in chemistry, including the centenaries of Mme. Curie's Nobel Prize and the founding of the International Association of Chemical Societies.

Chair: Stanislaw Penczek

30. Any Other Business (discussion only)

Prof. Jin noted that the Agenda had been completed significantly earlier than expected. He therefore invited the Division Presidents and Standing Committee Chairs to give brief updates to their written reports.

Prof. Mahaffey reported that the Committee on Chemistry Education discussed a Flying Chemist visit and a Young Ambassadors for Science program for Ethiopia. The Committee also discussed a number of possible programs for the International Year of Chemistry.

Dr. Cesa reported that the Committee on Chemistry and Industry had discussed how best to use the program to grant complimentary Company Associate status to sponsors of IUPAC sponsored Conferences to recruit regular Company Associates.

Prof. Henry reported that the Committee on Chemistry Research Funding was discussing how to harmonize the applications among national funding agencies to simplify applications for joint research projects.

Prof. Rossi noted that the Physical and Biophysical Chemistry Division was promoting translations of the *Green Book* in Japanese, Italian, French, Turkish, Russian, and Chinese as well as investigating a possible web version. He also commented that the Committee discussed the maintenance issues that have arisen with the highly successful atmospheric chemistry kinetic data base.

Prof. Tatsumi reported that the Inorganic Chemistry Division had discussed the importance of making users of atomic weight data aware that there was significant variation in the atomic weight of an element depending on the isotopic composition of the sample. He also reported that the Committee had reviewed ways to reinvigorate the work of the Division in molecular level chemistry. The Committee had also discussed how materials chemistry should be incorporated into the structure of IUPAC.

Prof. Tundo discussed the goals of the Organic and Biomolecular Chemistry Division and highlighted the various subcommittees that carried out the scientific work of the Division.

Prof. Ober noted that a major milestone of the Polymer Division for this biennium was the publication of the revised *Purple Book*. He also reported that a demonstration project was in the process of being funded by the US National Science Foundation which would carry out a call for projects in polymer chemistry submitted by investigators in more than one country. The Committee had also discussed a number of ideas for the International Year of Chemistry.

Dr. Fajgelj reported that the Analytical Chemistry Division was encouraging the use of Forums on the IUPAC Discussion Board to carry out the work of the Division. The project to revise the Orange Book was using an IUPAC Wikimedia site. The Committee had also

discussed the possibility of encouraging an open house on a single day at all reference materials sites.

Prof. Senesi commented that the name of the Chemistry and the Environment Division was a significant indication of the breadth of the work of the Committee, and all branches of chemistry are involved.

Prof. Templeton reviewed some of the key projects discussed at the meetings of the Chemistry and Human Health Division. These included harmonization of existing data base terminology in clinical chemistry, the possibility of asking the three winners of the Richter Prize to make a video about their work, drug development for neglected diseases in developing countries, and an expanded set of terms used in toxicology.

Dr. Moss reported that the Chemical Nomenclature and Structure Representation Division had reviewed work on Preferred Names for both organic and inorganic compounds, further developments in both InChI and InChIkey as well as the newly established InChI Trust.

Prof. Sydnes reported that CHEMRAWN had reviewed plans for three proposed conferences on biofuels, herbal medicine, and water in the Middle East. He noted that the Committee had sponsored a session at the Congress on Ethics in Chemistry. Prof. Sydnes commented that the Committee had cooperated with COCI to make a proposal to the UN group on the Strategic Approach to International Chemicals Management (SAICM).

Prof. De Bièvre suggested that the oral presentations by Division Presidents and Standing Committee Chairs be restored to the Council Agenda.

31. Closing Remarks, Adjournment

Prof. Jin thanked the delegates for their cooperation in making the meeting a success. He also thanked the Royal Society of Chemistry for the excellent arrangements. He wished the delegates a safe journey home and urged them to communicate what they had learned to their communities when they returned home.