

**47<sup>th</sup> IUPAC COUNCIL MEETING**  
**Istanbul, Turkey, 14-15 August 2013**  
**Minutes**

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**Contents**

1. Introductory Remarks and Finalization of Agenda.....	1
2. Approval of Minutes of 46 <sup>th</sup> Council Meeting and Matters Arising.....	2
3. Ratification of Decisions Taken by Bureau and Executive Committee since 46 <sup>th</sup> General Assembly.....	2
4. Announcement of Nominations for Union Officers and Bureau Members.....	2
5. Announcement of Time of Elections .....	3
6. Statutory Report of President on State of the Union.....	3
7. Vice President’s Critical Assessment .....	4
8. Report of Secretary General.....	4
9. Applications for National Adhering Organization (NAO) and Associate National Adhering Organization (ANAO) Status.....	6
10. Adoption of Recommendations on Nomenclature and Symbols.....	7
11. Reports of Division Presidents.....	8
12. Reports of Standing Committee Chairs .....	8
13. Financial Reports .....	9
14. Budget Proposal .....	10
15. National Adhering Organizations in Arrears .....	12
16. Applications for Associated Organization Status .....	12
17. Termination of Associated Organization Status .....	12
18. Proposals Formally Received from National Adhering Organizations .....	12
19. Organizational Changes in Existing IUPAC Bodies, Proposals for New and Reconstituted Bodies/Terms of Reference.....	12
20. Plans for 48 <sup>th</sup> General Assembly and 45 <sup>th</sup> Congress in 2015 (Busan, Korea).....	13
21. Approval of Site and Dates for 49 <sup>th</sup> General Assembly and 46 <sup>th</sup> Congress in 2017.....	13
22. Approval of Site and Dates for 50 <sup>th</sup> General Assembly and 47 <sup>th</sup> Congress in 2019.....	14
23. Report from the World Chemistry Leadership Meeting (WCLM).....	14
24. Reauthorization of Commissions.....	15
25. Approval of English as the Official Language of IUPAC .....	16
26. Important Matters Referred to Council by Bureau Not Covered by Items on Council Agenda .....	16
27. Election of Union Officers and Bureau Members and Approval of Elected Officers of Divisions .....	16
28. Any Other Business .....	18
29. Closing Remarks, Adjournment.....	20

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**1. Introductory Remarks and Finalization of Agenda**

IUPAC President Prof. Kazuyuki Tatsumi welcomed the delegates to the 47<sup>th</sup> IUPAC Council meeting. He thanked the Turkish Chemical Society for their hospitality and the excellent arrangements for both the General Assembly and the Congress.

47<sup>th</sup> IUPAC COUNCIL MEETING  
Minutes

Prof. Tatsumi asked for a moment of silence for IUPAC Colleagues deceased since Council last met in Puerto Rico.

Prof. Tatsumi introduced Prof. Orhan Altan who offered greetings from the International Council for Science (ICSU). Prof. Altan is from Turkey and is a member of ICSU Executive board ICSU. Prof. Altan reminded the audience of ICSU's role and vision and key priorities as outlined in the ICSU 2012-17 strategic plan, including area of international research collaboration, science for policy, and Universality of Science.

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

**2. Approval of Minutes of 46<sup>th</sup> Council Meeting and Matters Arising**

Prof. Tatsumi asked if there were any corrections or matters arising not covered elsewhere in the Agenda. No corrections or other matters were proposed. The motion below was made and seconded and was approved unanimously by a show of hands:

**Motion:** *Minutes of 46<sup>th</sup> Council Meeting in San Juan, Puerto Rico, are approved.*

**3. Ratification of Decisions Taken by Bureau and Executive Committee since 46<sup>th</sup> General Assembly**

All decisions taken by the Bureau and Executive Committee through calendar year 2012, since those approved by the Council at San Juan, Puerto Rico (Minute 3, 46<sup>th</sup> Meeting), are contained in the following Minutes, which were distributed to National Adhering Organizations on the dates shown:

91 <sup>st</sup> Bureau (San Juan, Puerto Rico, 4 August 2011)	11 January 2012
92 <sup>nd</sup> Bureau (Leiden, The Netherlands, 14-15 April 2012)	11 February 2013
145 <sup>th</sup> Executive Committee (San Juan, Puerto Rico, 4 August 2011)	11 January 2012
146 <sup>th</sup> Executive Committee (RTP, North Carolina, 15-16 October 2011)	11 January 2012
147 <sup>th</sup> Executive Committee (Leiden, The Netherlands, 15 April 2012)	11 February 2013
148 <sup>th</sup> Executive Committee (St. Petersburg, Russia, 20-21 October 2012)	11 February 2013

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 through calendar year 2012, since those approved by the Council at San Juan, Puerto Rico (Minute 3, 46<sup>th</sup> Meeting).*

**4. Announcement of Nominations for Union Officers and Bureau Members**

Secretary General Prof. René Deplanque noted that biographies of the nominees were available on the IUPAC website and in the Agenda Book for the Council meeting. He

47<sup>th</sup> IUPAC COUNCIL MEETING  
Minutes

informed the delegates that the voting order would be Vice President and then Elected Members of the Bureau. He indicated that depending on the result of the VP election, six or seven Bureau members would be elected to complete the full roster of ten members. The nominations received are given below.

Nominations Received:

*Vice President*

Prof. Natalia Tarasova (Russia)  
Prof. Qi-Feng Zhou (China/Beijing)

*Elected Members of the Bureau*

Prof. Russell J. Boyd (Canada)  
Prof. Tavarekere K. Chandrashekar (India)  
Prof. Richard Hartshorn (New Zealand)  
Mr. Colin Humphris (UK)  
Prof. Christopher K. Ober (USA)  
Prof. Pietro Tundo (Italy)  
Prof. Jean-Pierre Vairon (France)  
Prof. Kaoru Yamanouchi (Japan)  
Prof. Qi-Feng Zhou (China/Beijing)

**5. Announcement of Time of Elections**

Prof. Deplanque announced that the elections for Vice President, and Elected Members of the Bureau would be held at 09:30 hours on 15 August 2013. He then announced that the proposed tellers for the elections were Prof. Doug Templeton, Prof. Jan Reedijk, and Dr. Fabienne Meyers.

The motion below was made and seconded and was approved unanimously by a show of hands:

**Motion:** *Council approves the appointments of Prof. Douglas Templeton (Canada), Prof. Jan Reedijk (Netherlands) and Dr. Fabienne Meyers (IUPAC Secretariat) as Election Tellers.*

**6. Statutory Report of President on State of the Union**

Prof. Tatsumi reported on what has changed since 2011. He reported that IUPAC included three new NAOs (Argentina, Mozambique, and Nepal), two new ANAOs (Venezuela and Indonesia) and urged everyone to engage their neighboring countries to become member of IUPAC. He summarized IYC 2011 with the following key numbers: 97 participating

47<sup>th</sup> IUPAC COUNCIL MEETING  
Minutes

countries; about 10000 individuals having registered in the IYC Network; and about 1400 activities enlisted on the IYC website while many more took place in reality. The cooperation with UNESCO has been successful and results today in a joint project with PhosAgro. Other forthcoming activities might include activities during the 2014 IYCrystallography. Prof. Tatsumi highlighted that IUPAC has cooperation with the major chemistry Federations, including EUChEms, FLAQ (Latin America), FASC (Asia), and FACS (Africa). Such network is a strong supplement to IUPAC 61 NAOs, 2 ANAOs, 33 AOs, 97 CAs, 1275 individual members, and 1400 Fellows. The Union also keeps an important network through its conference sponsorship program and which included 68 events in 2011, 31 in 2012, 32 in 2013, and that already has more than a dozen for 2014. There are many activities on-going in all Divisions and Committees and the following few are good examples that deserve publicity: the IUPAC periodic table of the Isotopes (Division II), the Young Ambassador Chemistry (YAC) and Flying Chemists Program (FCP) (Committee on Chemistry Education, CCE), the Safety Training Program (STP) (Committee on Chemistry and Industry, COCI), the Committee on Chemistry Research Funding (CCRF) that set to facilitate multinational research cooperation, and the more traditional activity associated to the recognition and naming of new elements (the most recent two being 114 and 116). But despite these examples, Prof. Tatsumi asked what should IUPAC do to increase the values of its activities, and which is key to the future of the Union. Prof. Tatsumi argued that the Union should be proactive in ensuring that the projects that the Union support do capture the latest developments in all emerging areas of chemistry. He also argued that IUPAC should better cooperate with NAOs.

## 7. Vice President's Critical Assessment

Dr. Mark Cesa delivered a summary of his Vice President's Critical Assessment. The detailed entire written report is available in the Council Agenda Book.

The VPCA provided a timely opportunity to assess IUPAC capabilities versus its goals and to seek areas of potential improvement. Issues of infrastructures (including finances, membership, communications) and scientific priorities were exposed.

Dr. Cesa argued that a strategic review is long due and it should focus on questions such as the following: How should IUPAC balance its emphasis on its traditional areas in chemistry with new and emerging science (e.g. climate science, sustainability, nanotech, sensors, computational chem/big data)? What make IUPAC unique and different from national or regional chemical societies? How can we share IUPAC's science knowledge with the greater science community and in particular with emerging regions?

The strategic review will begin with a survey and gathered input from in/out IUPAC; in/out chemistry. We will also seek input from the Young Observers.

*A brief overview of Cesa's VPCA is available in the July-August 2013 issue of Chemistry International; issue distributed to the Council delegates; also online at <http://www.iupac.org/publications/ci/2013/3504/oc.html>*

## 8. Report of Secretary General

Prof. Deplanque presented his first report as secretary general since he started in January 2012 and following the elections last held in San Juan. He reported that the Union faced

47<sup>th</sup> IUPAC COUNCIL MEETING  
Minutes

numerous challenges but that there are many people, including the officers who contributed to implement solutions. Prof. Deplanque referred to the productive cooperation with UNESCO and the most recent 'Green Chemistry for Life' project emerging from a partnership with PhosAgro (*see VPCA, p. 62 in the Council agenda book and Treasurer report, p. 199*). Prof. Deplanque elaborated on the changes in publication policy that will affect both the IUPAC journal *PAC* and the newsmagazine *CI*. Recognizing that *PAC* income keeps going down and with no foreseeable income for web, he looked for a partner with the goal of leveraging to cost and workload. A contract with German/America De Gruyter has been recently signed and which should provide IUPAC with a professional support. Prof. Deplanque recognized the long time service of Professor James Bull who will as scientific editor of *PAC* retire by the end of the year. Professor Hugh D. Burrows (Universidade de Coimbra, Portugal) will succeed in that position. Prof. Deplanque invited the delegates to reach out to *CI* and call for input. He indicated that on the last 10 years, IUPAC published some 160 books, but yet, in a stock room in North Carolina, there is a stack of unsold volumes. This, he said, is not acceptable and we ought to find better basis for contracts with publishers to ensure that the ground work for negotiations with book publishers are sound and that Divisions and project leaders are not left alone in a process that can be challenging. Authors should be incentivized to publish work under IUPAC umbrella. Prof. Deplanque recognized that the IUPAC brand name is strong and that the Union must capitalize on this. One goal stressed by Prof. Deplanque is to establish one databank and ensure that IUPAC owns all the e-content copyright. He indicated that some old and current contracts do not specify what is to happen to e-content. It is likely that the Union will need legal advice to make sure that it preserves its rights. IUPAC produced standards and that is something to be proud of. Prof. Deplanque acknowledged the contribution of former executive director Terry Renner. He indicated that Renner's successor, John Petersen, had started a year ago but that he will be stepping down by the end September. Prof. Deplanque reported the web server was recently reset on a server in RTP. Previous servers had been consolidated by FIZ Chemie, but a move was required after a change of owner. This move includes hosting of the Inchi-trust website that is a consortium of publishers who support the implementation of Inchi that is a standard developed as the outcome of IUPAC Division VIII projects. Prof. Deplanque explained that Inchi provides a model of cooperation with outside organizations, and IUPAC future should explore extending its network and brand. One example to be considered is that idea of developing a seal of excellence: if someone uses an IUPAC standard, it could bear a IUPAC standard 'label'; journals might be interested in developing such label which will attest of their quality standard.

Prof. Paul De Bievre of Belgium welcomed the Secretary General in his new function. His main question was when the website will be at the disposal of the Divisions, and arguing that the website can use some improvement including a better search and a more appealing design.

The Secretary General replied that all was being worked out and that specific questions can be sent to him directly or to Bryan Pearson in the Secretariat.

Dr. Karl-Heinz Hellwich of Germany thanked Bryan for his work and support, but he asked what back-up and support does the Secretariat have.

47<sup>th</sup> IUPAC COUNCIL MEETING  
Minutes

Prof. Deplanque confirmed that the office has the support and back-up of an outside contractor that provides support 24/7.

Prof. Luis Montero Cabrera of Cuba asked if the existing discussion platform can be better configured to suit the NAOs and favor communication between NAOs.

Prof. De Bievre of Belgium recognized that *Chemistry International* was a noteworthy newsmagazine for the Union and wanted to thank Fabienne Meyers for her contribution as managing editor.

The Secretary General followed by recognizing the contribution of Professor James Bull as scientific editor for IUPAC Journal *PAC*.

Prof. Tara P. Dasgupta of Jamaica mentioned that he has been associated to IUPAC for 30 years as affiliate; yet, generally, he observed that young scientists in the Caribbean region do not know about IUPAC; the same is true for ICSU. Dasgupta urged IUPAC to find mechanism(s) by which it makes itself better known; there is a need to connect, to better connect, and may be to establish chapter. Young people are 'hungry' but they have limited ways to get involved. While funding is limited, we must find a mechanism. President Tatsumi replied that it was important to maintain connections and to make new ones; he emphasized CCE activities (YAC & FCP) as a mechanism to connect with local community.

Dr. Ting-Kueh Soon of Malaysia indicated that OPCW has more than 180 countries –more members than IUPAC; and therefore IUPAC must work harder to get more members. He suggested that IUPAC should help emerging countries to establish a chemical society which will allow them to also become part of IUPAC.

The Secretary General recognized the need to grow as an organization, but for that, the officers need more help.

Prof. Jamil Anwar of Pakistan echoed similar problems than those expressed by Malaysia and Jamaica: too few people know about IUPAC. He urged the officers to adopt better communications practices.

**9. Applications for National Adhering Organization (NAO) and Associate National Adhering Organization (ANAO) Status**

Prof. Deplanque reported that three organizations have applied for NAO status since the 46th Council Meeting. All three have been granted Provisional National Adhering Organization (NAO) status by the Executive Committee and have paid their 2012 National Subscriptions. Having paid all required National Subscription fees under the terms of Provisional Membership, Council approved their membership applications and all three organizations were eligible to vote during the Council meeting. The three organizations are:

- 9.1. Asociación Química Argentina (NAO)
- 9.2. Academy of Sciences of Mozambique (NAO)
- 9.3. Nepal Polymer Institute (NAO)

47<sup>th</sup> IUPAC COUNCIL MEETING  
Minutes

The following motion was approved by the required simple majority vote and with one vote against:

**Motion:** *Council approves the applications of the Asociación Química Argentina, of the Academy of Sciences of Mozambique, and of the Nepal Polymer Institute to become IUPAC National Adhering Organizations. This approval is subject to payment of the 2012 National Subscription fees by Argentina, Mozambique and Nepal.*

Dr. Rameshwar Adhikari of Nepal thanked the Council for their support.

9.4. Thailand has requested that its NAO to IUPAC be changed from the Chemical Society of Thailand to the Department of Science Service, Ministry of Science and Technology.

The representative from Hungary asked if that change was associated to any restriction imposed by that government agency over the priorities set by the Chemical Society. The representative from Thailand confirmed that it was only for economic reasons and they asked IUPAC to keep both contacts in place for regular communication with the Union.

The following motion was approved, with one vote against and 4 abstentions:

**Motion:** *Council approves the request from Thailand to change its NAO Representative to IUPAC from the Chemical Society of Thailand to the Department of Science Service, Ministry of Science and Technology.*

## 10. Adoption of Recommendations on Nomenclature and Symbols

Prof. Deplanque referred the Delegates to the list of published Recommendations and Technical Reports compiled in the Agenda Book. The motion below was approved unanimously:

**Motion:** *Council formally adopts the Recommendations approved by the Interdivisional Committee on Terminology, Nomenclature and Symbols (ICTNS) and published, or scheduled to be published, in Pure and Applied Chemistry from August 2011 through July 2013.*

### 10.1. Validation and Naming of New Elements

Prof. John Corish summarized the most recent efforts regarding the validation and naming of new elements with atomic numbers 114 and 116. Documentation was provided in the Council Agenda Book. IUPAC has officially approved the name flerovium, with symbol Fl, for the element of atomic number 114 and the name livermorium, with symbol Lv, for the element of atomic number 116. Priority for the discovery of these elements was assigned, in accordance with the agreed criteria, to the collaboration between the Joint Institute for Nuclear Research (Dubna, Russia) and the Lawrence Livermore National Laboratory (Livermore, California, USA). The collaborating team has proposed the names flerovium and livermorium that have now been formally approved by IUPAC.

47<sup>th</sup> IUPAC COUNCIL MEETING  
Minutes

Review of claims by the joint IUPAC-IUPAP working Party examining element 113, 115, 117, and 118 is on-going.

## 11. Reports of Division Presidents

The reports of the Division Presidents were accepted as read. Full reports are available in the Council Agenda Book.

- 11.1. Division I – Physical and Biophysical Chemistry Division [Prof. Yamanouchi]
- 11.2. Division II – Inorganic Chemistry Division [Dr. Loss]
- 11.3. Division III – Organic and Biomolecular Chemistry Division [Prof. Ganesh]
- 11.4. Division IV – Polymer Division [Prof. Russell, in for Prof. Buback]
- 11.5. Division V – Analytical Chemistry Division [Prof. Camões]
- 11.6. Division VI – Chemistry and the Environment Division [Dr. McConnell]
- 11.7. Division VII – Chemistry and Human Health Division [Prof. Templeton]
- 11.8. Division VIII – Chemical Nomenclature and Structure Representation Division [Prof. Hartshorn]

## 12. Reports of Standing Committee Chairs

The reports of the Standing Committee Chairs were accepted as read. Full reports are available in the Council Agenda Book.

- 12.1. Committee on Printed and Electronic Publications [Dr. Martinsen]
- 12.2. CHEMRAWN Committee [Prof. Sydnes]
- 12.3. Committee on Chemistry and Industry [Dr. Dröscher]
- 12.4. Committee on Chemistry Education [Prof. Chiu]
- 12.5. Interdivisional Committee on Terminology, Nomenclature and Symbols [Prof. Weir] Written report only
- 12.6. Project Committee [Prof. Powell]  
Written report only
- 12.7. Evaluation Committee [Prof. Penczek]

Dr. Rameshwar Adhikari of Nepal thanked Professor Leiv Sydnes and the CHEMRAWN Committee for including Nepal in their group, and also CCE for the Flying Chemists initiative and the Polymer Division for the active participation and support.



47<sup>th</sup> IUPAC COUNCIL MEETING  
Minutes

Prof. Tatsumi thanked the Divisions Presidents and Standing Committees Chairs to maintain and guide high level of activities.

### 13. Financial Reports

#### 13.1. Biennial Report of Treasurer

Prof. Corish noted in his report that two of IUPAC's three principal income streams, sales from publishing and income from investments, have declined continuously during the past biennium, in line with worldwide experience in these areas. The first of these is being addressed commencing in 2014 through collaboration with a new publication partner, although it will take some more time for the full benefits of this partnership to emerge. A more flexible investment policy is being developed to attempt to maximize our investment income from a changing market.

Prof. Corish thanked the NAOs for their ongoing support, noting that the national subscriptions constitute the 3<sup>rd</sup> largest income for IUPAC.

Prof. Corish reported on the financial outcome from the International Year of Chemistry and recognized that overall only a fraction of the USD 500k allocated to the year celebrations were necessary and spent. The partnership with UNESCO was considered mutually successful and one noticeable result is a new joint project, the "PhosAgro/UNESCO/IUPAC Partnership in Green Chemistry for Life" which will tap into IUPAC scientific expertise over the next 5 years.

Prof. Corish also noted that over the last two years there have been a number of unforeseen but inescapable costs related to the appointment of a new Executive Director.

Prof. Corish announced that, starting in January 2014, receipts will be required for all claims made by members for reimbursements of expenses although the rates of allowances will not be changed. This documentation is required for better financial auditing practices.

#### 13.2. Report of Finance Committee

Prof. Corish noted in his report that the two meetings of the Finance Committee held since the last General Assembly in Puerto Rico have, in addition to normal business, been concerned with careful reviews of the Union's investment portfolios. These reviews resulted in some adjustments in the investments being made in 2012.

In the current markets the yields from the types of high-quality bonds in which IUPAC normally invests have been reduced to one half or even less of the yields that the Union received from bonds that have recently matured. Reviews of the Investment Policy and Fund Policy Statements are underway to seek to optimize income from currently available investment opportunities.

#### 13.3. Accounts for 2011 and 2012

Prof. Corish noted that the Agenda Book contained the audited financial statements for 2011 and 2012 and that no areas of concern were noted by the auditors. The operations of the

47<sup>th</sup> IUPAC COUNCIL MEETING  
Minutes

Union for the biennium were reasonably within budget. However, from a practical point of view, decreases in value of the yields from the investment portfolios and in the income from the sales of publications continue to serve stark warnings that the Union must diversify if it is to continue its current level of activities.

13.4. Appointment of Auditors for 2013 and 2014

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 2013 and 2014. 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 2013 and 2014.*

## 14. Budget Proposal

14.1. Proposed Budget for 2014-2015

Prof. Corish reported that framing the draft budget for 2014-2015 had not been an easy task and a very large number of options had been considered. It was important first to state that these considerations showed immediately that continuing to operate in the *status quo* would produce a large deficit and was clearly not a tenable way to proceed. As an example, the publication operations would have almost certainly gone into deficit within another year or so, largely due to steadily declining subscriptions for *Pure and Applied Chemistry*, along with continuously rising costs to produce and distribute this journal. The signing of an agreement with a partner for future publishing has resulted in the largest changes evident in the budget finally proposed for the next biennium when compared with budgets from earlier biennia. All of the production and printing costs of *Pure and Applied Chemistry* and *Chemistry International* will be taken over by the new publisher and the estimated publication income shown, USD 130 000, may eventually be increased or reduced somewhat depending on sales and on the production costs incurred by the publisher. This income, which is expected to increase in future years, is significantly less than the typical surpluses from our publications of former years when the operation generated a considerable profit. This reduction together with the reduction in investment income are the reason for the cuts – some very difficult – which have had to be made in our proposed expenditures for 2014-2015.

For instance, Prof. Corish noted that in the proposed budget, the surplus funds from completed, terminated, underspent, and abandoned projects are included in the budget instead of being transferred to the Strategic Opportunity funds as it was in previous years.

The IUPAC Prize for Young Chemists will see a reduced budget and the format of the prize itself might change while one consideration might be to not support travel for the winners to the Congress. Prof. Corish announced that Solvay has offered to sponsor the prize and negotiations are on-going to define the terms of such sponsorship.

47<sup>th</sup> IUPAC COUNCIL MEETING  
Minutes

14.2. National Subscriptions for 2014-2015

The Agenda Book includes a table showing the calculated 2014-2015 National Subscriptions. At the 2010 meeting of the Finance Committee it was agreed that an average of four quarters of currency exchange rate data be used for the calculation of National Subscriptions in national currencies. The effect of this longer-term average will be to even out anomalously high or low exchange rates during periods of rapid market fluctuation. National Subscriptions for 2012 and 2013 were calculated using this new procedure for determining time-averaged currency exchange rates. This same procedure has been used to calculate the National Subscriptions for 2014 and 2015.

It is worth noting that the calculation of these subscriptions follows an agreed algorithm that has complex dependencies on changes in the values of national production of chemicals relative to total worldwide production and fluctuations in currency exchange rates. The only variable that is under control of Council is the total National Subscription revenue that is obtained annually from the current 61 National Adhering Organizations (NAOs) of IUPAC. Experience shows that the individual National Subscriptions are influenced much more by changes in chemical turnover and exchange rates than by the size of the total National Subscription itself. For the next biennium it is proposed to increase the total National Subscription by 3% in each year.

Prof. Reedijk (The Netherlands) asked how, in the proposed budget, the AMP contributes to zero income. Prof. Corish noted that this was just a safe way to tabulate this input. It will depend of the actual price of *Chemistry International* that is yet to be finalized and which is negotiated with De Gruyter.

Prof. Garson (Australia) noted that the prospect having project funds returned to central budget might actually trigger more spending.

Prof. Dasgupta (Jamaica) suggested that *Chemistry International* could, like *PAC*, have an e-only subscription option.

Dr. Koch (Germany) asked about the terms of the contract with De Gruyter and how long does it stand and what cancellation options are there. Prof. Deplanque answered that the contract was for 5 years with an early escape option after 3 years. Dr. Koch suggested that IUPAC err on the side of caution and develop a 'Plan B' in case this new partnership was to fail.

The Secretary General indicated that under this new partnership with De Gruyter, IUPAC will benefit of the marketing support which it did not have while being self-publisher.

Prof. Horvai (Hungary) asked if the benefit of receiving *PAC* for free will be discontinued. Prof. Deplanque confirmed that the current access for NAOs will remain. Also *PAC* might be included and bundled with other journals in different subscription options offered by the publisher.

Prof. Qi-Feng Zhou (China) noted that the proposed National Subscription will translate in an increase of about 20% for China. This is a very difficult situation for the NAO which currently faces restrictions and an overall cut by 5%. Prof. Corish acknowledged that the

47<sup>th</sup> IUPAC COUNCIL MEETING  
Minutes

timing of the market fluctuations might in some cases be disadvantageous for some NAOs. Specific cases such as China could be reexamined.

Prof. Garelick (UK) asked what other models were considered to keep *PAC* sustainable and if *PAC* will be open access? The Secretary General commented that open access for *PAC* will not be that expensive.

Council was asked to approve the proposed budget, and the National Subscriptions that arise from its implementation, for the 2014-2015 biennium. The motion below was voted on by cards with 144 votes in favor, no against, and 5 abstentions:

**Motion:** *Council approves the proposed Budget for 2014-2015 and the National Subscriptions implied by the proposed Budget.*

**15. National Adhering Organizations in Arrears**

Prof. Deplanque reported that as of 13 August 2013 only one National Adhering Organization –that of Greece- was in arrears for the 2012 National Subscription payment. The Secretariat is working with this NAO to resolve the problem as soon as possible.

**16. Applications for Associated Organization Status**

Prof. Deplanque reported that there were no applications for Associate Organization (AO) status received since the 46<sup>th</sup> Council Meeting.

**17. Termination of Associated Organization Status**

Prof. Deplanque reported that the International Plasma Chemistry Society and the Calorimetry Conference were both several years in arrears in the payment of their annual AO fees. Neither has responded to contacts to try to rectify this situation. 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 both the International Plasma Chemistry Society and the Calorimetry Conference for failure to pay annual subscription fees for several years.*

**18. Proposals Formally Received from National Adhering Organizations**

Prof. Deplanque reported that no proposals had been received from NAOs.

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

Prof. Deplanque reported that the Committee on Printed and Electronic Publications (CPEP) proposed to change its focus and referred the Council to the Agenda Book for details.

47<sup>th</sup> IUPAC COUNCIL MEETING  
Minutes

The first motion to change the CPEP name was moved.

Prof. Garcia Martinez (Spain) asked what the rationale for the change of the name was. Dr. Martinsen (CPEP chair) explained that with the increase importance of e-science, increase of data, while simultaneously IUPAC journal will move to publishing partner, CPEP has a chance to shift its activities and also focus on databases and data.

The following motion was approved with 1 vote against and no abstentions:

**Motion 1:** *Council approves that the name of this Committee be changed from the Committee on Printed and Electronic Publications to the Committee on Publications and Cheminformatics Data Standards (CPCDS).*

Prof. Deplanque introduced the second motion related to the renamed committee and indicated that a way to ensure better communication of this CPCDS with other Divisions and Standing Committees is to consider the role and position of the chair.

The following motion was unanimously approved:

**Motion 2:** *Council approves that the Chair of the newly renamed Committee on Publications and Cheminformatics Data Standards be appointed to the Bureau.*

19.1. Interdivisional Committee on Terminology, Nomenclature and Symbols (ICTNS)

Prof. Deplanque introduced a similar motion for ICTNS chair to be appointed to the Bureau, and that to facilitate communication with other Divisions and committees.

See the Agenda Book for details of the change proposed for ICTNS by its Chair, Prof. Ron Weir. The following motion was unanimously approved:

**Motion:** *Council approves that the Chair of the Interdivisional Committee on Terminology, Nomenclature and Symbols be appointed to the Bureau.*

**20. Plans for 48<sup>th</sup> General Assembly and 45<sup>th</sup> Congress in 2015 (Busan, Korea)**

The Korean NAO presented a brief report on preliminary preparations for the next General Assembly and World Chemistry Congress to be held in Busan, Korea, on 9-14 August 2015. Please see the Agenda Book for additional details. (*see also [www.iupac2015.org](http://www.iupac2015.org)*)

**21. Approval of Site and Dates for 49<sup>th</sup> General Assembly and 46<sup>th</sup> Congress in 2017**

Prof. Deplanque reported that proposals had been received from Australia and Brazil to host the General Assembly and Congress in 2017. Both proposals had been evaluated by the Bureau during its 92<sup>nd</sup> Annual Meeting held in Leiden, The Netherlands, in April of 2012. Both Australia and Brazil submitted proposals that were deemed by the Bureau to be in compliance with the formal call and both were approved for presentation at this Council Meeting in Istanbul.

Additional supporting details were provided in the Agenda Book.

47<sup>th</sup> IUPAC COUNCIL MEETING  
Minutes

After presentation by each delegations, the Council was asked to vote either for Australia or for Brazil as the host for the biennial IUPAC events in 2017.

Prof. Deplanque reported that the results of the ballots were as follows:

Melbourne, Australia:	31
Sao Paulo, Brazil:	119

The following motion was passed:

**Motion:** *Council approves the proposal from Brazil to host NAO for the 49<sup>th</sup> General Assembly and 46<sup>th</sup> Congress to be held in 2017.*

## 22. Approval of Site and Dates for 50<sup>th</sup> General Assembly and 47<sup>th</sup> Congress in 2019

Prof. Deplanque introduced the proposal made by the French NAO.

Proposals to host the 50<sup>th</sup> General Assembly and 47<sup>th</sup> Congress in 2019 were also received and evaluated by the Bureau during its 92<sup>nd</sup> Annual Meeting held in Leiden, The Netherlands, in April of 2012. Both China/Beijing and France submitted proposals that were deemed by the Bureau to be in compliance with the formal call and both were approved for presentation at this Council Meeting in Istanbul. Since that time, the Chinese Chemical Society has withdrawn its proposal in consideration of the fact that the IUPAC events in 2019 will celebrate the 100<sup>th</sup> anniversary of the birth of IUPAC in France. The historical significance of this founding event in France provided the basis for China/Beijing's thoughtful and generous decision to withdraw its proposal. At the same time, China/Beijing has also expressed interest to host the 2021 IUPAC General Assembly and World chemistry Congress.

The Agenda Book includes the letter that officially announces the intention to withdraw the proposal by the Chinese NAO.

The Agenda Book includes the detailed proposal from France as previously approved by the Bureau.

By vote of Council, France was chosen as the host for the historic events in 2019.

Prof. Deplanque reported that the result of the ballots was as follows:

For:	151
Against:	4

**Motion:** *Council approves the proposal from France to host NAO for the 50<sup>th</sup> General Assembly and 47<sup>th</sup> Congress to be held in 2019.*

## 23. Report from the World Chemistry Leadership Meeting (WCLM)

Dr. Michael Dröscher (COCI chair) reported on the activities of the World Chemistry Leadership Meeting (WCLM) that took place during the General Assembly on 13 August 2013.

47<sup>th</sup> IUPAC COUNCIL MEETING  
Minutes

This year WCLW was set in the context of the recent International Year of Chemistry 2011 and Rio +20, and with a focus on IUPAC's role to the future of chemistry. The objective was to engage young chemists in a debate and ask their opinions on the strategic challenges that IUPAC is facing. Several NAOs, including France, Germany, Japan, Russia, UK, and US contributed and helped finance the trips of young chemists; a group of more than 40 young observers/participants (YOs) was convened. Dr. Dröscher reported that the YOs coined IUPAC as the "United Nations of Chemists". The idea of the WCLM was to let the YOs discuss and develop answers to the following four issues: 1) the future of chemistry in the context of the Millennium Development Goals; 2) the scope of pure and applied research; 3) IUPAC's role today and in future; and 4) career aspirations.

The group met in the morning of August 13th in three breakout groups, each with about 15 participants. Each group prepared key messages from their findings and each had a rapporteur who presented these key messages in the afternoon plenum session. That session was opened by Past President Nicole Moreau, and on the stage, a panel included Professor Barry Halliwell, Professor Niyazu Sariciftci, and Vice President Mark Cesa. More than 120 attendees were present in the afternoon session.

Practical suggestions reported by YOs and that could further benefit their experience as YOs include: IUPAC should develop a post-YOs program to nurture more interest and bind young people within IUPAC; the support of IUPAC members as mentors is valuable; YOs should participate in current task groups to get further engaged in IUPAC activities; more technology-based projects shall be initiated; as a way to increase diversity; other languages than English shall be utilized; other successful NGOs are very good at engaging their volunteers, and their model and practice could be applied by IUPAC.

The ideas emerging from the debate –including YOs reflection on the main global challenges– will be passed onto the vice president and as an input for the Union strategic review. As an outcome of this meeting, a commentary style article will be prepared.

*(An article has been published in Chem Int, Jan-Feb 2014, p. 24:  
<http://dx.doi.org/10.1515/ci.2014.36.1.24>)*

Then, one young observer/participant from the UK took the stage. She commented that to be truly representative, the number of YOs should really increase and from more countries; she urged all the NAOs to extend their support to more young chemists. She recognized that IUPAC members encouraged the YOs to be more than observers, and some YOs already have ideas to develop new projects and will join existing projects. Striking to most of the YOs is the scientific breath and cultural diversity that IUPAC embodies.

#### 24. Reauthorization of Commissions

Prof. Deplanque noted that Bylaw 3.302 requires that Council reapprove all existing Commissions. Council then voted on the motion below. The motion was unanimously approved by a show of hands:

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

## 25. Approval of English as the Official Language of IUPAC

Prof. Deplanque noted that Statute 5.405 requires that Council “determine every four years the one language in which the official records of the meetings of the Council, Bureau, and Executive Committee shall be kept and published.” The last time that such a determination was made was at the General Assembly held in Glasgow, Scotland, in the year 2009, four years ago.

The Bureau proposes 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 2014-2017.*

## 26. Important Matters Referred to Council by Bureau Not Covered by Items on Council Agenda

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

## 27. Election of Union Officers and Bureau Members and Approval of Elected Officers of Divisions

The election slate (nominees for Vice President and for Elected Members of the Bureau) and information about each of the candidates may also be found in the Agenda Book.

The elections for Vice President and Bureau Members were held as announced earlier, at 9:30 hours on 15 August 2013.

In the election for Vice President, there were 106 votes for Prof. Natalia Tarasova (Russia) and 51 Prof. Qi-Feng Zhou (China/Beijing). Prof. Natalia Tarasova was elected Vice President.

The following 7 candidates were elected on the Bureau:

Prof. Russell J. Boyd (Canada)	116 votes
Prof. Tavarekere K. Chandrashekar (India)	113 votes
Prof. Richard Hartshorn (New Zealand)	129 votes
Mr. Colin Humphris (United Kingdom)	129 votes
Prof. Christopher K. Ober (United States)	149 votes
Prof. Kaoru Yamanouchi (Japan)	135 votes
Prof. Qi-Feng Zhou (China/Beijing)	155 votes

The following motion was passed:

**Motion 1:** *Council ratifies the election of Natalia Tarasova as the new Vice President and of Elected Members of the Bureau named above.*



47<sup>th</sup> IUPAC COUNCIL MEETING  
Minutes

Elections for Divisional offices had been completed prior to the Council Meeting, as is the normal procedure, and only required final ratification by the Council. The names of officers continuing their current terms of office are here below included for completeness.

*Division I-Physical and Biophysical Chemistry Division*

Roberto Marquardt – President 2014-2015, France  
Angela K. Wilson – Vice President 2012-2015, USA  
Assaf Friedler – Secretary 2012-2015, Israel  
Kaoru Yamanouchi – Past President 2014-2015, Japan

*Division II-Inorganic Chemistry Division*

Jan Reedijk – President 2014-2017, Netherlands  
Lars Öhrström – Vice President 2014-2017 Sweden  
Markku Leskelä – Secretary 2012-2015 Finland  
Robert D. Loss – Past President 2014-2015 Australia

*Division III-Organic and Biomolecular Chemistry Division*

Mary J. Garson – President 2014-2015, Australia  
Margaret A. Brimble – Vice President 2014-2015, New Zealand  
Axel Griesbeck – Secretary 2012-2015, Germany  
Krishna N. Ganesh – Past President 2014-2015, India

*Division IV-Polymer Division*

Michael Buback – President 2012-2015, Germany  
Gregory T. Russell – Vice President 2014-2015, New Zealand  
Michael Hess – Secretary 2012-2015, Germany

*Division V-Analytical Chemistry Division*

D. Brynn Hibbert – President 2014-2015, Australia  
Jan Labuda – Vice President 2014-2015, Slovakia  
Zoltán Mester – Secretary 2012-2015, Canada  
M. Filomena Camões – Past President 2014-2015, Portugal

*Division VI-Chemistry and the Environment Division*

Laura M. McConnell – President 2012-2015, USA  
Petr Fedotov – Vice President 2014-2015, Russia  
Hemda Garelick – Secretary 2014-2017, UK

*Division VII-Chemistry and Human Health Division*

Thomas Perun – President 2014-2015, USA  
Rita Cornelis - Vice President 2014-2015, Belgium  
Michael Schwenk – Secretary 2010-2017, Germany

*Division VIII-Chemical Nomenclature and Structure Representation Division*

Karl-Heinz Hellwich – President 2014-2017, Germany  
Ture Damhus – Secretary 2008-2015, Denmark  
Richard M. Hartshorn – Past President 2014-2015, New Zealand

47<sup>th</sup> IUPAC COUNCIL MEETING  
Minutes

The following motion was passed:

**Motion 2:** *Council ratifies the selection of Division Officers that has been completed previously during individual divisional elections coordinated through the IUPAC Secretariat.*

**28. Any Other Business**

28.1. The National Adhering Organization from Belgium requested that the following items be added to the Agenda for the Council Meeting for information, discussion and possible decision.

(a) In what manner may new contacts be established by IUPAC with major international organizations (e.g., European Commission, the World Health Organization, International Agency for Research on Cancer, UNESCO, World Meteorological Organization, *et alia*). Is there an established procedure for doing this and how is the decision made?

(b) Would it be possible for the Officers of IUPAC to highlight during the Council Meeting what the expectations of the NAOs sponsoring IUPAC should be due to their sponsorships and to give a brief summary of the Statutes and Bylaws of the Union (a copy of the current Statutes and Bylaws is attached below in the Agenda Book)?

(c) Is there any evidence that IUPAC Standards and Recommendations are acknowledged and applied by big emerging industries in the fast-growing countries (BRICS, African Countries, *et alia*)?

Prof. De Bievre introduced these questions and added CCQM (the BIPM Consultative Committee for Amount of Substance) to the list under (a) above. He stressed that at CCQM for instance it might appear that scientific decisions are taken on political ground, and not scientific; he asked how does IUPAC stand in relation with such decisions.

Colin Humphris from UK suggested that the Bureau should take this question and report at the next Council meeting.

28.2. Professor Bob Loss, President of the Inorganic Chemistry Division (Div II) informed the Council that the Commission on Isotopic Abundances and Atomic Weights (II.1) has met in Gebze, Turkey, prior to the General Assembly. Following its meeting, the Commission recommended the changes to the Atomic Weights as presented by the Division II president during his report.

The standard atomic weights of cadmium, molybdenum, selenium, and thorium have been changed based on recent determinations of terrestrial isotopic abundances. In addition, the standard atomic weights of 15 elements have been revised based on the new assessment of their atomic masses by International Union of Pure and Applied Physics.

47<sup>th</sup> IUPAC COUNCIL MEETING  
Minutes

The following changes in the standard atomic weights have been made:

aluminium (aluminum): from 26.981 5386(8) to 26.981 5385(7)  
arsenic: from 74.921 60(2) to 74.921 595(6)  
beryllium: from 9.012 182(3) to 9.012 1831(5)  
cadmium: from 112.411(8) to 112.414(4)  
caesium (cesium): from 132.905 4519(2) to 132.905 451 96(6)  
cobalt: from 58.933 195(5) to 58.933 194(4)  
fluorine: from 18.998 4032(5) to 18.998 403 163(6)  
gold: from 196.966 569(4) to 196.966 569(5)  
holmium: from 164.930 32(2) to 164.930 33(2)  
manganese: from 54.938 045(5) to 54.938 044(3)  
molybdenum: from 95.96(2) to 95.95(1)  
niobium: from 92.906 38(2) to 92.906 37(2)  
phosphorus: from 30.973 762(2) to 30.973 761 998(5)  
praseodymium: from 140.907 65(2) to 140.907 66(2)  
scandium: from 44.955 912(6) to 44.955 908(5)  
selenium: from 78.96(3) to 78.971(8)  
thorium: from 232.038 06(2) to 232.0377(4)  
thulium: from 168.934 21(2) to 168.934 22(2)  
yttrium: from 88.905 85(2) to 88.905 84(2)

These changes in the standard atomic weights will be published in a new “Table of Standard Atomic Weights 2013”, which will be published in *Pure and Applied Chemistry* in 2014. The proposed changes will be published in a press release to be distributed after the General Assembly.

This was a Bureau proposal that did not require a floor motion. Voting was by delegation cards, with a simple majority of votes cast required for approval. There were one vote abstaining, no vote against; the following motion was therefore approved:

**Motion:** *Council approves the Press Release on proposed changes to the atomic weights resulting from recent deliberations by the Commission on Isotopic Abundances and Atomic Weights after its meeting in Gebze, Turkey.*

*(The final release was posted on the IUPAC website on 24 Sep 2013:  
<http://www.iupac.org/news/news-detail/article/standard-atomic-weights-revised-v2.html> )*

### 28.3. Other questions from the assembly

Prof. Alan Krief (IOCD Executive Director) presented himself as a Young Observer from 1997; he asked if IUPAC values the voices of the Young Observers so much, why do they have no voting rights?

Dr. ThaoNguyen Nguyen, a 2013 Young Observer from UK presented the preview of the video project the YOs have initiated during the GA; in this project they recorded their

47<sup>th</sup> IUPAC COUNCIL MEETING  
Minutes

experiences as YOs. They hope to expand the recording and provide encouragement for future YOs to get engaged in IUPAC activities.

*(The video was released on 23 Nov 2013: [http://www.youtube.com/watch?v=g\\_yFZeqcTgo](http://www.youtube.com/watch?v=g_yFZeqcTgo))*

## 29. Closing Remarks, Adjournment

By way of pre-closing remarks, Vice President Cesa highlighted how the strategic review will proceed. He announced that a core team including Richard Hartshorn, Natalia Tarasova, Maria Van Dam-Mieras, Javier Garcia-Martinez, Jung-Il Jin will be consulted to develop the necessary background information and to update the Union's goals and vision.

The initial and basic questions will be: 1) how effective is IUPAC today? 2) Looking forward to centennial, if IUPAC is to remain effective, what will it look then? 3) how to go from here to there? Dr. Cesa invited the NAOs to consider these questions and announced that he will be reaching out to the NAOs for input.

President Tatsumi thanked the delegates for their active participation and cooperation in making the Council meeting a friendly assembly where questions are debated. He thanked Professor Nicole Moreau for her diligent service to IUPAC, in particular for being president during the International Year of Chemistry. He also recognized with appreciation the willingness of Dr. Terry Renner to coordinate this assembly. He wished the delegates a safe journey back home.

Prof. Tatsumi adjourned the Council meeting.

*For reference, the Agenda Book for the IUPAC Council meeting in Istanbul is available for direct download as one PDF (17.3 MB) from <http://iupac.org/ga/47th/47thagenda>*

*The actions taken at IUPAC Council and Bureau, Istanbul 2013 were released on [www.iupac.org](http://www.iupac.org) on 6 Sep 2013 – see <http://www.iupac.org/news/news-detail/article/actions-taken-at-iupac-council-and-bureau-istanbul-2013.html>*