

# International Year of Chemistry 2011

A Summary of the Operations During 2007 – 2011 of the  
IUPAC's Management Committee for the IYC 2011

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John Malin, Ph.D, Management Committee Chair

*Supplement to The 2011 IYC Description and Analysis report*  
[www.iupac.org/project/2012-009-1-020](http://www.iupac.org/project/2012-009-1-020)

**A Summary of the Operations During 2007-2011 of IUPAC's Management Committee for the International Year of Chemistry 2011**

by

**John M. Malin, Ph.D, Management Committee Chair**

**Timeline:**

<b>August, 2007</b>	<b>Management Committee Chair Appointed</b>
<b>March, 2008</b>	<b>Management Committee meets in Istanbul, Turkey along with Bureau</b>
<b>May, 2008</b>	<b>Project Request submitted requesting support for Management Committee meetings</b>
<b>August, 2008</b>	<b>Management Committee meets at IUPAC Headquarters. First version of Prospectus drafted</b>
<b>December, 2008</b>	<b>IYC-2011 is approved by United Nations General Assembly</b>
<b>April, 2009</b>	<b>Management Committee meets at Bratislava, Slovakia along with Bureau</b>
<b>August, 2009</b>	<b>Management Committee meets in Glasgow, Scotland during IUPAC Congress and General Assembly</b>
<b>November, 2009</b>	<b>Management Committee meets at IUPAC Headquarters, RTP</b>
<b>November, 2009</b>	<b>Second Project Request submitted for Management Committee meeting support</b>
<b>February, 2010</b>	<b>Progress Report Circulated</b>
<b>April, 2010</b>	<b>Management Committee meets in Sofia, Bulgaria along with Bureau</b>
<b>November, 2010</b>	<b>Management Committee meets at IUPAC Headquarters</b>
<b>August, 2011</b>	<b>Informal Management Committee Meeting in San Juan, Puerto Rico during Congress and General Assembly</b>

As noted above, the Management Committee met two or three times annually during 2008-2010. In addition, conference calls and meetings of subcommittees were held as necessary. The items considered by the Management Committee at its meetings are outlined in the following pages.

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**August, 2007, Torino, Italy.** At the IUPAC Congress and General Assembly held in Turin Italy, IUPAC President Bryan Henry invited John Malin, former Chair of the CHEMRAWN Committee, to chair the Management Committee for the International Year of Chemistry – 2011.

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**March 27, 2008, Meeting in Istanbul, Turkey.** The first meeting of IYC 2011 Management Committee was held at the Marmara Hotel, Istanbul, Turkey on March 27. Persons present were Natalia Tarasova, Bryan Henry, Peter Mahaffy, Kazuki Tatsumi, John Jost, Jung-Il Jin, Sean Corrish, Mark Cesa, Nicole Moreau, David Black and John Malin (Chair). The following topics were discussed:

- 1) **Genesis of IYC-2011.** Bryan Henry provided background information on IYC 2011. He noted that, although the Russian Federation had suggested that an event be held in 2009, celebrating the 125th anniversary of the birth of Dmitry Mendeleev, it was soon recognized that the lead time was insufficient for United Nations designation by 2009. As only the United Nations could designate an international year, Dr. Henry asked Dr. Peter Mahaffy to head the effort to secure UN designation. Dr. Mahaffy and representatives of several countries next visited UNESCO in Paris to discuss with staff what steps to take.. Ultimately, Mahaffy and colleagues from the Committee on Chemical Education developed an application which was submitted by the Ethiopian Ambassador at UNESCO. It was considered and approved by the UNESCO Executive Board in April 2008. The application went subsequently for consideration by the full UNESCO Council at its meeting in late 2009 and shortly afterward it was approved by the UN General Assembly. The Management Committee discussed with Dr. Mahaffy the details of the timeline and process for UN approval.
- 2) **Mission of IYC.** Committee members considered that the purpose of the International Year of Chemistry would be to develop a public focus on the appreciation of chemistry. It was felt that IYC-2011 should try to accomplish the following:
  - Support the UN goals of the Decade of Education for Sustainable Development
  - Assist the public to understand that chemistry is not so difficult or arcane a subject, underscoring that chemistry is a human activity.
  - Show how chemistry is creative, for example in the creation of new materials and medicines.
  - Show that chemistry has a bright future and is an attractive field for young people, indicating that it is chemists who are centrally positioned to address the challenges of the future.

By consensus the Management Committee agreed that: *The declared purpose of the IYC is to celebrate the achievements of chemistry and its contribution to the well-being of humankind.*

- 3) **Role and Structure of the Management Committee.** It was decided the committee would serve to publicize and invite participation in IYC-2011. The Management Committee and IUPAC would take a role in organizing several international "cornerstone" events, but individual countries would be responsible for organizing and financing events in their own countries. In addition it was decided that:
- FACS, FASC, ICCA, FLAQ, and EuCheMS would all be approached to suggest members for the Management Committee.
  - An additional group of IYC-2011 stakeholders, e.g., national chemical societies, industrial firms and their associations, would, it was hoped, share expertise, provide advice to the Management Committee, and implement events in their own countries.
- 4) **Proposed IYC-2011 Events.** The Management Committee received suggestions of several international events:
- An Opening Ceremony in Paris organized jointly in conjunction with UNESCO. The event would recognize the anniversary of the Nobel prize given to Mme. Marie Curie, also to be featured throughout IYC-2011.
  - A "kickoff" celebration consisting of a half-day symposium and a social event at PACIFICHEM, scheduled for December 2010 in Honolulu, possibly with the involvement of CCE, COCI and CHEMRAWN. The theme of the symposium might be the organization of IYC-2011 activities.
  - A mid-year celebration of IYC-2011 during the IUPAC Congress and General Assembly scheduled to be held in Puerto Rico in 2011.
  - Other events, possibly one involving The Chemical Heritage Foundation.
  - A closing ceremony or event.
- 5) **IYC-2011 Budget, Fiduciary and Legal Responsibilities. Role and responsibilities of the IUPAC Secretariat.**
- It was planned to develop the Management Committee's budget in a proposal to be submitted as soon as possible to the IUPAC Project System. If additional funds were needed for Management Committee expenses, requests for extensions to the proposal would be made.
  - It was agreed, as per standard IUPAC policy, that legal responsibilities for IUPAC-sponsored local projects would be borne by the host countries carrying those projects out.
  - John Jost accepted appointment as a member of the Management Committee. He agreed to serve as a conduit through which staff support would be supplied.

- It was agreed that funds would be accumulated and disbursed through IYC-2011 account(s) held that the IUPAC Secretariat.
- It was agreed that an IYC-2011 logo would be developed with professional help contracted by the IUPAC Secretariat. An IYC-2011 Website would be created by a Secretariat contractor.
- John Malin agreed to draft a letter inviting chemical societies and appropriate stakeholder organizations around the world to participate in IYC- 2011. The letter would be distributed by the Secretariat via regional federations such as FLAQ. In regions like North America where there is no local federation the national chemical societies and other organizations would be contacted directly.
- It was agreed that monitoring activities would include distribution of reports placed on the IYC-2011 discussion board and that periodic reports would be made to stakeholders and the IUPAC Bureau and Council.

Chair John Malin presented a summary of the meeting to the IUPAC Bureau at its meeting several days later.

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**May 30, 2008** - John Malin submitted a formal request to the IUPAC Project System for travel funding to support meetings of the Management Committee. Membership of the committee included David Black, Bryan Henry, Gabriele Infante, Jung-Il Jin, Wolfram Koch, Peter Mahaffy, Ahmed Mohammed, Tin-Kueh Soon, Natalia Tarasova, Nicole Moreau (ex-officio), John Jost (ex-officio) and John Malin (chair). It was soon expanded to include Colin Humphris. Fabienne Meyers attended meetings in an ex-officio capacity. The project request for \$30,000 in committee travel funds was approved.

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**August 14, 2008, Meeting at IUPAC Headquarters.** The Management Committee met at IUPAC Headquarters at Research Triangle Park, North Carolina. Principle matters considered were: (1) an update on progress in obtaining UN designation of IYC-2011; (2) setting of IYC-2011 goals and objectives; (3) discussion of the Management Committee's composition and role; (4) organization of the stakeholders forum; (5) a draft of the Prospectus, or background document (see below for the 2008 version); (6) a listing of planned and proposed IYC-2011 national, regional and international activities; (7) an update of publicity/outreach activities (logo, website, news releases); (8) financial and staff resources - including fundraising from public and private sources.

John Jost reminded the committee that all Management Committee members had access to the electronic discussion board including the Management Committee Forum and the Stakeholders Forum. An initial version of the Prospectus was developed:

**Prospectus, 2008 Version**  
**International Year of Chemistry - 2011**  
*Chemistry – our life, our future*

**Introduction and Rationale:** All known matter – gas, liquid and solid – is composed of the chemical elements or of compounds made from those elements. Humankind's understanding of the material nature of our world is grounded in our knowledge of chemistry. Indeed all living processes are controlled by chemical reactions.

The International Union of Pure and Applied Chemistry (IUPAC) strongly believes that *it is time to celebrate the achievements of chemistry and its contributions to the well-being of humankind*. At its General Assembly in Turin, Italy in August 2007, IUPAC unanimously approved a resolution in favor of the proclamation of 2011 as the International Year of Chemistry. During the International Year of Chemistry, planned activities will:

- a. Increase the public appreciation of chemistry in meeting world needs** - Chemistry, appropriately called the *Central Science*, is both a deeply philosophical inquiry and an applied scientific endeavor. The science of chemistry is fundamental to humanity's understanding of the world and the cosmos. Molecular transformations are central to the production of foodstuffs, medicines, fuels, metals, i.e., virtually all manufactured and extracted products. Through IYC the chemical community will publicly celebrate the art and science of chemistry, its key contributions to developing human knowledge, advancing economic progress and fostering a wholesome environment.
- b. Increase interest of young people in chemistry** - In order to ensure that first-rate minds continue to be attracted to and challenged by the central science, IYC will underscore the role of chemistry in managing natural resources sustainably. In partnership with the United Nations, the International Year of Chemistry will make a strong educational contribution toward the goals of the UN Decade of Education for Sustainable Development, particularly in the key action areas of *health* and *environment*. National and international activities carried out during the International Year will emphasize the importance of chemistry in helping to sustain the natural resource base for life.
- c. Generate enthusiasm for the creative future of chemistry** – Humanity's understanding of the world is grounded in our developing knowledge of chemistry. Creative opportunities to discover exciting new principles and applications continually appear as our understanding of molecular properties grows. Chemists will inevitably play a key role in overcoming the challenges facing today's world, for example in helping to address the United Nations Millennium goals. A deep understanding of the science is essential for developing molecular medicine, for creating new materials and sustainable sources of food and energy.
- d. Celebrate the 100<sup>th</sup> anniversary of the Mme. Curie Nobel Prize and the 100<sup>th</sup> anniversary of the founding of the International Association of Chemical Societies.** - The year 2011 marks the one-hundredth anniversary of the Nobel Prize in Chemistry awarded to *Marie Sklodowska Curie*, recognizing her discovery of the elements radium and polonium. Dr. Curie's achievements continue to inspire students, especially women, to pursue careers in chemistry. The year 2011 also marks the one-hundredth anniversary

of the founding in Paris of the International Association of Chemical Societies to address the need for international cooperation among chemists and international standardization of nomenclature, atomic weights, physical constants, and scientific communication.

The International Year of Chemistry – 2011 will:

- Improve the understanding and appreciation of chemistry by the public.
- Enhance international cooperation by serving as a focal point for activities by national chemical societies, educational institutions and non-governmental organizations.
- Promote the role of chemistry in contributing to solutions to global challenges.
- Build capacity by engaging young people with scientific disciplines, especially the scientific method of analysis developed by hypothesis, experiment, analysis and conclusions.

Most appropriately, this international initiative is being led by the International Union for Pure and Applied Chemistry (IUPAC), which in 1919 succeeded the International Association of Chemical Societies. IUPAC, founded by chemists from academia and industry, has a truly global reach with 51 National Adhering Organizations and 21 Associate Adhering Organizations.

**Activities:** Local organizers will be invited to generate ideas for appropriate activities. Proposals will be reviewed by the Management Committee and, if approved, the activity will be listed on the IYC website and given permission to use the IYC logo. Several international ‘cornerstone’ events are also planned, including a kickoff celebration at PACIFICHEM in Honolulu in December 2010 and inaugural ceremonies in Paris. Examples of IYC events taking place in local, state, regional, and national venues include:

- Treating all levels of students, from preschool children to university students to chemistry demonstrations at appropriate levels.
- Organizing visits to industrial sites including manufacturers, chemical producers, metal and petroleum refiners.
- Publicizing the contributions that chemistry makes to the global economy by submitting articles to the press and to magazines or developing television and radio programs.
- Sponsoring poster exhibitions highlighting the usefulness and wonder of chemistry.
- Organizing problem-solving projects through which students can use their knowledge of chemistry to develop solutions to local problems.
- Publicizing the contributions that chemistry has made to improve lives, particularly recent developments in chemical research.
- Holding career fairs and inviting professionals to schools to show how they use chemistry in their jobs. Organizing hands-on activities and demonstrations to help participants gain an understanding of what it would be like to work in a chemistry-related field.
- Interacting with government leaders to underscore the importance of a strong chemical enterprise.

To assist in the developing projects, the Management Committee will produce a web-based “toolkit” of ideas organizers of IYC events. The IYC website will include links to national chemistry celebrations worldwide, listing IYC activities.

### **Administration and Timeline:**

IUPAC is making the necessary efforts to have the year 2011 declared the International Year of Chemistry by UNESCO and the United Nations General Assembly. With the support of several organizations, Ethiopian national representatives presented a proposal to the UNESCO Executive Board, which endorsed the request at its April, 2008 meeting. The Union will work with national and international federations and societies to publicize IYC within the context of ongoing annual national and regional celebrations of chemistry that are scheduled to take place. All countries will be encouraged to participate.

In addition, the organizers will begin a fundraising campaign on behalf of IYC-2011 so that it can provide seed funding for projects, especially in developing countries, to elucidate the benefits of chemistry to the public and to expand them. IUPAC will seek resources to hold proposed “cornerstone” international events such as the opening ceremonies in Paris, a pre-launch event in Honolulu at Pacificchem 2010, a celebration at the IUPAC Congress and General Assembly in August 2011 in Puerto Rico, and a closing event.

- Now that UNESCO’s Executive Board has endorsed designation of 2011 as the International Year of Chemistry, the request will be carried forward to the next UNESCO General Conference and the United Nations General Assembly.
- A relatively small Managing Committee, with worldwide representation, is supervising the IYC-2011 project. Also planned is a larger IYC Implementation Group, members of which will be available to share ideas, expertise and contacts with each other and with the Management Committee.
- A proposal to the IUPAC Project Committee to cover costs of meetings of the Management Committee has been approved.
- A second request will be forwarded to the Project Committee for support of logo and website development and IYC brochures.
- IUPAC will publicize plans for activities and reports as they are received. This information will be collected for dissemination in appropriate publications or through the internet.

### **IYC-2011 Proposed Timeline**

#### **2007-2008**

#### **Inception**

Approval at IUPAC General Assembly – Torino, August 2007  
Formation of Management Committee  
First meeting of Management Committee – Istanbul, March 2008  
Fundraising begins  
Website version 1 online  
Logo design Brochure 1.0 designed  
UNESCO Executive Board decision – March 2008  
Invitations sent to participants by November 2008



**2009**

**Planning**

Secretariat structure finalized and set up  
Management Committee Meeting at March Bureau meeting  
Event at IUPAC General Assembly – Glasgow  
Fundraising continues  
Cornerstone project proposals entertained  
Cornerstone coordinators meeting  
Brochure 2.0  
UN Designation Decision

**2010**

**Preparation**

Management Committee monitors planned activities  
New brochure release  
Website version 2  
First activities and events  
December opening symposium/ceremonies at PACIFICHEM 2010

**2011**

**Implementation**

January opening ceremony in Paris  
Global events  
Regional Events  
National Events  
Event at IUPAC General Assembly – Puerto Rico  
December Closing Ceremony

**2012**

**Evaluation**

Evaluation and follow-up  
National reports  
IYC-2011 Secretariat final report

**IYC Management Committee:**

Dr. John M. Malin, Chair  
Prof. David StC. Black, IUPAC Sec'y General  
Dr. Mark Cesa, IUPAC Committee on Chemistry (COCI) Representative  
Prof. Bryan Henry, IUPAC Past President  
Dr. Colin Humphris, ICCA Representative  
Prof. Gabriel Infante, FLAQ (Latin American Federation)  
Prof. Jung-II Jin, IUPAC President  
Dr. John Jost, IUPAC Executive Director  
Prof. Wolfram Koch, EuCheMS

Prof. Nicole Moreau, IUPAC Vice-President  
Prof. Peter G. Mahaffy, IUPAC Committee on Chemistry Education  
Dr. Ahmed M. Mohammed, FASC (African Federation)  
Prof. Ting-Kueh Soon, FACS (Asian Federation)  
Prof. Natalia Tarasova, Mendeleev University

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**November, 2008** - A draft Strategic Marketing Plan had been presented by two consultants working with Fabienne Meyers and circulated to several members of the Management Committee. Based on the comments obtained a formal proposal was prepared.

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**December 2008, Paris, France.** The UN General Assembly designated 2011 as the International Year of Chemistry.

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**April 16, 2009, Meeting in Bratislava, Slovakia.** The Management Committee met in conjunction with the meeting there of the IU PAC Bureau. The following items were discussed:

**1) Attracting Partners for IYC-2011**

- The committee congratulated Julia Hasler and Peter Mahaffy on their work resulting in the rapid designation of IYC-2011 by the United Nations General Assembly.
- Colin Humphris reported on interactions with the ICCA.
- Jung-Il Jin, David Black and Nicole Moreau reported on their recent meeting in Frankfurt, Germany with officers of the major European chemical societies - from France, Germany, Italy, Netherlands, Poland, Russia, Spain, Switzerland, and United Kingdom. Plans had been discussed for celebration of IYC-2011 by those organizations.
- Bryan Henry described his meetings with American Chemical Society officials during the ACS national meeting.
- Bryan Henry and John Malin outlined their meeting with RSC President C. David Garner. Garner noted that the African Chemistry Congress would meet in January 2011 and offered RSC's assistance in making IYC a highlight of that meeting.
- Prof. Jin reported on a meeting held the previous day with representatives of the chemical societies of Austria, Bulgaria, Czech Republic, Slovenia and Slovakia. He also described his meetings with the Secretary-General of the United Nations and his contact with the UN Office of Cultural and Scientific Affairs.
- Peter Mahaffy reported on his discussions with the Chemical Heritage Foundation.

**2) Logo and Website.** The IYC-2011 logo design and the slogan "Chemistry – Our Life, Our Future" were accepted by the committee. It was decided that official documentation and the website would feature the IYC logo linked with those of UNESCO and IUPAC.

Fabienne Meyers briefed the committee on the current stage of IYC website development, with a target release date of August 2009. The website was constructed based partly on the experience of the International Year of Astronomy. Main areas included an open ideas forum for discussion of events and activities and the facility for submitting proposals for approval of local activities proposed around the world. The website would offer a place for official sponsors of IYC to display their logos and for other supporting organizations and individuals to be recognized – relevant to fundraising.

- 3) **Guidelines for Recognized IYC-2011 Events.** Wolfram Koch presented a proposal from the working group on guidelines for proposed events. Events or activities would be considered eligible as a part of IYC, and use of the logo would be authorized provided they addressed one of the objectives of the year, which were:
  - Increase the public appreciation of chemistry in meeting world needs
  - Increase the interest of young people in chemistry
  - Generate enthusiasm for the creative future of chemistry
  - Celebrate major historical events in chemistry including the centenaries of Mme. Curie's Nobel Prize and the founding of the International Association of Chemical Societies
- 4) **Staffing for IYC at the IUPAC Secretariat.** In response to concerns expressed by the committee that the work on IYC-2011 would create an overload at the IUPAC Secretariat, John Jost and David Black responded that, while the new Executive Director should join the staff early in 2010, and John Jost was subsequently retiring, John was scheduled to remain at RTP until the end of August 2010. His presence during that overlap was expected to help meet staffing needs.
- 5) **Fundraising.** The fundraising subcommittee was chaired by Prof. Sean Corish. Its main task was to raise money to pay the incremental costs of IYC to IUPAC, specifically for the main cornerstone events, the website and other publicity materials. The Management Committee envisioned (a) targeting various groups of donors by setting out the value propositions for those specific groups in particular versions of the Prospectus, and (b) establishing different levels of sponsorship for the international year, identifying those supporters whose names/logos would be displayed and how prominently. John Jost noted that since IUPAC is a 501(c)3 organization in the United States, contributions in the US would be tax-deductible.
- 6) **Planning for IYC Events.** The Committee agreed upon certain details of the following events, noting that more complete blueprints for those events would be needed in order to attract funds.
  - **IUPAC Congress and General Assembly in Glasgow.** The biennial meeting, scheduled for August 2009, was seen as an opportunity for chemistry societies worldwide to discuss and share ideas for IYC. Foremost among these opportunities was the World Chemistry Leadership Meeting (WCLM) which would provide a

mechanism for stakeholders to engage in the IYC-2011 planning process. The WCLM would take the form of a facilitated discussion in a theater- style layout. John Malin chaired a subcommittee formed to organize the WCLM. Secondly, Council delegates would be invited to roundtable discussions based on the four major IYC 2011 themes listed in the Prospectus. Results of the discussions would be reported to the WCLM and to the Council. Finally, a meeting would be arranged among the representatives of very large chemical societies during the Congress and General Assembly.

- **Inaugural event – Paris – January 27/28, 2011.** Plans were begun for IYC 2011 to be opened officially at the UNESCO offices in Paris. UNESCO would provide facilities for up to 800 attendees along with exhibition space for organizations and companies. IUPAC Vice-President Nicole Moreau agreed to chair a subcommittee to plan the details. (See following page for subcommittee memberships.)
- **PACIFICHEM 2010.** IYC began planning for a promotional reception at PACIFICHEM 2010, to generate publicity a month in advance of the official inauguration in Paris.
- **Congress and the General Assembly – San Juan Puerto Rico, August 2011.** Gabriel Infante informed the committee that the organizers in Puerto Rico were planning for a special session on behalf of IYC 2011 honoring the Nobel awards in chemistry and recognizing the contributions of women scientists.
- **IYC Closing Ceremony – Brussels.** Dr. Jin reported that Dr. Paul Baekelmans had indicated he believed the Solvay Foundation would support a closing ceremony in Brussels at the end of 2011. Dr. Malin agreed to follow-up with Dr. Baekelmans and appointing a subcommittee
- **Marie-Sklodowska-Curie Celebrations.** Nicole Moreau noted that she would meet with Polish scientists on May 6 to discuss events celebrating the centennial of the Nobel Prize given to Mme. Curie. A subcommittee to encourage events recognizing Mme. Curie's achievements and the role of women in chemistry was named with Natalia Tarasova as Chair.
- **Planning for Regional and National Events.** Reports from IUPAC officers and IYC Management Committee members indicated that the European and Central European Chemical societies, the RSC, ACS and the Puerto Rican organizers of the 2011 Congress and General Assembly were very much aware of IYC 2011. Plans for activities had advanced rapidly in the USA, France and Germany. In the United States the Director of the Chemistry Division of National Science Foundation had declared the Division to be receptive to proposals for IYC activities. In Germany the GDCh had met with stakeholders to discuss funding. Planning in France for the opening event had already begun. The L'Oreal Foundation reportedly planned to sponsor an event in March 2011 celebrating the contributions of women to science, focusing on New Materials.

A detailed list of action items was prepared and followed through by the relevant members of the Management Committee.

- 7) **Subcommittees. The following subcommittees were appointed. For some subcommittees, membership was later expanded by invitation of the subcommittee chair.**
1. *WCLM in Glasgow*: John Malin (Chair), Mark Cesa, Bryan Henry, Colin Humphris
  2. *Round Tables in Glasgow*: Natalia Tarasova (Chair) Peter Mahaffy, Anders Kallner, Stan Penczek
  3. *Mme Curie Celebrations and Women in Chemistry*: Natalia Tarasova (Chair), Brigitte van Tiggelen, Nicole Moreau
  4. *Paris Celebration*: Nicole Moreau (Chair), Paul Baekelmans, Christopher Buxtorf, Gilberte Chambaud, Bernard Chambon, Julia Hasler, Oliver Homolle, François Rocquet
  5. *San Juan Celebration*: Gabriel Infante (Chair), Bryan Henry, David Black, Peter Mahaffy, Ram Lamba, additional Puerto Rican representatives
  6. *Brussels Celebration*: Paul Baekelmans (Chair) Jung-II Jin, Nicole Moreau, Fabienne Meyers, Colin Humphris
  7. *Fundraising*: Sean Corish (Chair), John Malin, Colin Humphris, Julia Hasler, Leiv Sydnes, Michael Droescher, Mark Cesa
  8. *PACIFICHEM Celebration*: John Malin (Chair), Kaz Tatsumi, David Black, Fabienne Meyers, Katie Bowman (NAS)
  9. *Africa Congress Celebration*: Ahmed Mohammed (Chair), Neal Coville, Mike Booth, Nicole Moreau
  10. *CHEMRAWN on Chemistry and Sustainable Development*: Leiv Sydnes (Chair), Maria van Dam-Mieras
  11. *Prospectus Revisions*: John Malin (Chair), Peter Mahaffy, Mark Cesa, Colin Humphris

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**August 4, 2009, Meeting in Glasgow, Scotland.** The following items were considered:

- 1) **Website.** Fabienne Meyers describe the newest version of the website which had been substantially updated in July.
- 2) **Fundraising.** Sean Corish noted that the fundraising subcommittee had met twice. He distributed a written report with budget estimates for the activities and events that IUPAC would be supporting, with a preliminary cost estimate of \$1.6 million. It was agreed that a coherent approach to sponsors would be important, that coordination among groups raising funds at national or regional levels would have to take place, and that some level of distinction would need to be drawn among those sponsors supporting specific events and those prepared to support IYC 2011 as a whole. Additional points were raised as follows:

- Fundraising would be an effort to recoup expenditures by the union with the goal of making participation in IYC 2011 cost neutral.
- Whenever possible, IUPAC would need to employ personal contacts with individuals such as CEOs and company directors, using a document tailored to the interests of the proposed sponsoring organization.
- Because additional expertise would be needed in contacting foundations, corporations and government funding agencies, the committee believed that IUPAC should hire a professional fundraiser.
- Peter Mahaffy suggested the funding of the Global Experiment might serve as a unifying factor, in that a request might be made to the European Commission's Seventh Framework Program. Ales Fajgelj noted that the International Atomic Energy Agency might also be a source of funds, although that agency's budget for 2011 was already set.
- Gabriel Infante noted that the Collegio de Quimicos in Puerto Rico already had arranged some sponsorship agreements

### 3) Discussion of IYC 2011 Cornerstone Events.

- Glasgow Congress and General Assembly.** John Malin noted the successful World Chemistry Leadership Meeting (WCL M) which had been held several days before on Tuesday, August 4. WCLM attendance was nearly 120 persons, even though only 80 had signed up in advance. Natalia Tarasova announced that four roundtable discussions, each addressing one of the aspects of IYC 2011, were held successfully on Monday afternoon August 3. The discussion leaders were expected to report during the Council meeting on August 6.
- Inaugural event – Paris – January 2011.** Nicole Moreau referred to her written report of the meeting of the inaugural event planning committee. The report included updates on use of the auditorium at UNESCO headquarters, use of the UNESCO foyer area for exhibits, logistics of the luncheon, the need for a well-known Chairperson to be recruited for the opening event, use of the joint UNESCO/IUPAC logo, the languages of the opening ceremony which would be English and French with simultaneous translation, and the showing of a short film about the life of Mme. Curie.
- Maria Skłodowska-Curie Celebrations.** Nicole Moreau announced that an event would be organized in Paris at La Sorbonne immediately after the opening ceremony. The granddaughter of Mme. Curie had agreed to attend. Another celebration was scheduled to take place in Poland during 2011.
- Puerto Rico 2011 Congress and General Assembly.** Gabriel Infante informed the committee that the Congress had the support of the government of Puerto Rico through its Convention Bureau and Tourist Authority. Five Nobel Laureates had been recruited as plenary lecturers. Colin Humphris noted that, in addition to the Congress events described by Gabriel Infante, a General Assembly event such as a WCL M focused on chemistry and sustainability, should be organized.

### 4) Reports from IUPAC Organizations on Participation in IYC 2011

- **CCE** Peter Mahaffy discussed CCE's special planning committee which was working to formulate a global water experiment as a unifying event. Other ideas included contacting national chemical societies about establishing a single worldwide chemistry day or week, collecting individual chemists stories, considering a celebration of chemistry and stamps and also development of an IYC 2011 coin that might be used as a prize in geo-caching. David Black noted that an isotopic periodic table is being developed for educational purposes.
- **COCI.** Mark Cesa reported for the Committee on Chemical Industry (COCI), which was discussing projects including creating of a commemorative stamp for IYC in the United States; using networking tools like Facebook to emphasize chemists service to the public; organizing a symposium or workshop in industrial chemistry; establishing an IUPAC industrial award or prize; and two ideas for CHEMRAWN conferences related to the science and capacity building issues raised by SAICM.
- **CHEMRAWN.** Leiv Sydnnes announced that the CHEMRAWN Committee is interacting with the SAICM Secretariat, seeking funding for a conference on environmental issues as well as a general meeting about chemistry and sustainability.
- **IUPAC Divisions.** Michel Rossi reported that Division I (Physical and Biophysical Chemistry) had several ideas for IYC activities: a) an experiment on solar hydrolysis of water; b) an experiment in crystal growth, and c) an experiment in synthesis of nanotubes or polymers calculating the number of kilometers of either that could be produced under given conditions. Ales Fajgelj reported that Division V (Analytical Chemistry) would request proposals from the analytical chemistry community for participation in IYC 2011. The Analytical Chemistry Division contemplated an event highlighting the importance of reference material around the world, to demonstrate IUPAC's role in establishing international chemical standards.
- **Known Planning for Regional and National Events.** Many proposed national and regional activities were described at the morning World Chemistry Leadership Meeting. Bryan Henry announced that American Chemical Society had canvassed its committees and divisions and was developing an extensive list of IYC 2011 activities. Ahmed Mohammed noted that the African Chemistry Meeting was planned for January 2011 in South Africa.

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### November 8, 2009, Meeting at IUPAC Headquarters.

- 1) **Update from the IUPAC Executive Committee.** David Black reported that the Executive Committee had discussed several items related to IYC. Dr. Corish, IUPAC Treasurer, added that the Executive Committee, based on its own evaluation of the costs and benefits, had decided not to hire a professional fundraiser for IYC. However, it was stated that the Executive Committee did not intend to restrict the use of consultants for fundraising when specific expertise might be needed for a particular

purpose. The Executive Committee also decided to commit US\$500,000 to the IYC. With the expectation that this amount and more could be raised from outside sources, IUPAC was nevertheless prepared to spend this much from its Project System if necessary.

- 2) **Management Committee Role in IYC 2011.** Dr. Malin introduced Draft Terms of Reference for the Management Committee and there was a general discussion of (1) the role and responsibilities of the committee and (2) how an idea could become a IYC-2011 project or event. It was resolved that the latter process should be written down so that all those involved would clearly understand the responsibilities of the various groups involved in carrying a project through.
- 3) **Management Committee Expenses.** Dr. Malin noted that he had been asked to provide a revised project application to cover funding for the committee for the remainder of its existence. The application was expanded by adding the information requested (minutes of previous meetings) and it was resubmitted.
- 4) **Fundraising.** Prof. Corish indicated the report from his subcommittee, provided as part of the meeting agenda. He then reviewed the decision by the Executive Committee to set an overall budget of US\$500,000 for IYC related activities, emphasizing that this was not a budget allocation but rather an upper limit to what IUPAC was prepared to invest in the IYC. He noted that fundraising could not start until the program of activities for the IYC had been more fully defined. He also commented that coordination of fundraising among the groups arranging specific cornerstone events, the national groups, and the finance subcommittee would be important and relatively complex.
- 5) **IYC 2011 Outreach.** Prof. Henry noted that Dr. Malin had asked him to chair an outreach subcommittee which would be responsible for public communications.
  - **Website** Fabienne Myers reviewed both the current state of the IYC website and the next phase of the development of the site, scheduled to become active in January 2010. The current site allowed individuals to register as participants in the IYC network and to post ideas on ideas page. The new functionalities would include the ability to register an activity or event in the site's online database. Users would be able to search the database for activities or events planned for a given country. There was some discussion of whether commercial links should be accepted for placement on the site and it was concluded not to accept them. The committee decided that guidelines for the use of the IYC logo on products should be developed. Prof. Corish agreed to draft guidelines for the use of the IYC logo on commercial products.
  - **Brochure.** Dr. Jost reported he had signed a contract with UNESCO that provided funding for the design of an IYC brochure. Prof. Henry commented that this brochure would be targeted at the general public. The finance subcommittee would be developing a separate brochure for fundraising purposes.



- **PowerPoint Presentation.** The committee decided to update the current PowerPoint presentation on IYC for general use. Dr. Malin agreed to do this. Fabienne Myers agreed to work with a designer to create a consistent "look and feel" among the various brochures, presentations and posters that IYC 2011 would generate. Dr. Meyers reported also that the IUPAC conference calendar poster for 2010 would include the IYC slogan "Chemistry – Our Life, Our Future", while the 2011 calendar would include an IYC planner.

**6) Activities Led by Management Committee/IUPAC Organizations.**

- Prof. Moreau reviewed the composition of the subcommittee and the preliminary program for the Inaugural Celebration in Paris. She noted an event planned for the following day to celebrate Marie Sklodowska-Curie's accomplishments.
- Dr. Malin discussed possible arrangements for the pre-2011 reception at PACIFICHEM.
- Information was received from Prof. Infante indicating that arrangements for the San Juan Congress and General Assembly were proceeding well.
- Prof. Moreau reported that planning for the Closing Ceremony was well advanced and the chemical industry in Belgium had pledged substantial support.
- Peter Mahaffy noted that the International Conference on Chemical Education would provide a venue for the meetings of project task groups for the unifying event. Proposals for funding were being developed.

**7) Activities of Other Organizations.**

- The committee discussed reports of planned activities from societies in Europe, Canada, the United States, Asia, and Latin America. An inquiry was to be sent about status of an event at the Federation of African Chemical Societies meeting in January 2011.

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**November 2009 Second Project Request submitted for management Committee meeting support.**

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**February 10, 2010 Conference Call.** Dr. Malin distributed a written update of progress since the previous meeting. Noteworthy advances were:

- 1) **Cornerstone Events .** Dr. Nicole Moreau provided a preliminary outline and of the opening ceremony to be carried out at UNESCO headquarters in Paris starting on Thursday, January 27, 2011 and concluding the following day. She also gave details of the Franco-Polish celebration of Marie Curie to be held on January 29 at the Sorbonne.
- 2) **Fundraising.** Sean Corish reported that the fundraising subcommittee had met on November 9 at IUPAC headquarters to discuss four topics: 1) fundraising for the IUPAC program of IYC events, 2) opportunities that might be offered to potential

sponsors, 3) the pricing structure to be adopted for sponsorship, and 4) the preparation of a list of potential donors. Possible categories of sponsors, depending upon the level of sponsorship, included **IYC Global Official Partners, IYC Organizers, IYC Associates, and Friends of the IYC**. Prof. Corish circulated to the committee a draft which set out the opportunities and charges for potential sponsors and a list of the special events they might be interested in funding.

- 3) **Outreach.** Dr. Myers and the website team had launched the latest version of the website in mid-January. The **IYC network** listed 738 contacts in 94 countries and the five cornerstone events including the opening and closing ceremonies, the 2011 Congress and General Assembly, the PACIFICHEM 2010 reception and the SACI/FASC meeting. The **IYC PowerPoint presentation** that originated with Mark Cesa and John Malin was made available on the Management Committee's Discussion Forum. IUPAC had received support from UNESCO to produce an **IYC 2011 brochure**, for which a designer was being contacted.
- 4) **American Chemistry Council.** Mark Cesa and John Malin reported they had met with staff of the American Chemistry Council on 20 November 2009 to discuss ACC's participation in IYC 2011. Considerable interest was generated in the Global Experiment, in which students around the world would research local methods of water purification and report their findings into a global mapping program such as provided by Google.
- 5) Mark Cesa noted that he had presented an overview of the IYC to members of the Danish Chemical Society in Copenhagen.

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#### **April 15, 2010. Meeting in Sofia Bulgaria.**

1. **Management Committee Expenses.** John Malin announced that the project proposal requesting committee travel funds had been approved. It provided for the current meeting of the Management Committee and one more.
2. **Fundraising.** Sean Corish, Chair of the fundraising subcommittee, referred to his report which was provided with the agenda materials. He noted the subcommittee had met the previous day and the following points were raised in discussion:
  - In answer to a question about whether contributions would be tax-deductible, he said they would be in the USA and Switzerland but not in other countries where IUPAC does not have tax-free status.
  - A fundraising brochure had been produced and mailed to 132 Company Associates contacts with a cover letter inviting contributions for IYC. Early responses were slim. Corish reviewed the brochure content and noted that the Launch Committee for the Inaugural Event in Paris had created a slightly different version of that document.
  - The Secretariat identified an additional 50 persons to whom the brochure would be mailed and the fundraising subcommittee discussed further development of the

brochure. Overall, the flyer was to be made available to IUPAC Divisions, to NAO's and some 10,000 brochures were to be printed for distribution at IUPAC sponsored conferences. However, it was expected to update these in stages over time, in order to add sponsors' logos whenever possible. .

- Dr. Corish envisioned a need for follow-up operations, particularly personal visits to potential contributors. It was hoped that COCI members, the IUPAC President and other officers would be available make these visits. Some funds, needed to pay necessary costs of their travel were to be provided for in the recent Project Proposal.
- Prof. Corish expressed the need to develop a list of contacts and to record fundraising activity by various IUPAC and, where known, non-IUPAC units in order to avoid redundant requests to any single donor. A staff member was needed at the IUPAC Secretariat to take charge of this activity as well as other IYC functions that needed to be managed centrally. Dr. Corish pointed out that the same practice was adopted by International Year of Astronomy organizers.
- When seeking support, it was considered important to establish contact with the CEOs of potential donor companies. Corish explained that a relationship was already being built with potential sponsors as some \$300k had come in supporting the opening and closing events. When visited, the CEO's of major corporations would already know, he said, what contributions their company was making and they would especially want to know what the promotional value of the IUPAC brochure would be to them. A key point to make with them was that sponsorship of IYC 2011 would be a major opportunity to disseminate the company name across the globe. Colin Humphris had been in discussions with Dow, Shell and BASF. Nicole Moreau noted that the President of the French Chemical Society was from BASF. She planned to approach him for support.
- The fundraising subcommittee expected to submit proposals to various funding agencies, including the European Commission, the Gates Foundation, and others. Julia Hasler added that some funds might be raised in relatively small amounts at UNESCO, particularly for IYC-2011 activities in developing countries. She added that UNESCO was receiving requests for both national and global events.
- Peter Mahaffy added that IYC should encourage development of "twinning" activities partnering developed and developing countries.
- An action item from the November 2009 meeting was a plan to send a grant application for \$30,000 to ICSU. Bryan Henry reported that he wrote a proposal which he forwarded for necessary additions by two relevant IUPAC Divisions.

Prof Corish noted that the subcommittee would pull all items together and communicate by conference call during the next several weeks. It planned to meet again on November 5, just before the scheduled Management Committee meeting at the Secretariat.

3. **IYC 2011 Website (Meyers).** Dr. Meyers provided an update on development of the Website. She noted that the key goals of the project were to publicize IYC 2011, to encourage active international participation and to act as a resource database and clearinghouse for all national activities. The proposed activities were vetted as they came in by Management Committee representatives. Her presentation included

examples of the screens available, general content, key ideas and visual cues. Dr. Meyers gave a view of the deployment timeline and noted the following:

- Over 1000 contacts were now listed and the number of queries was increasing substantially, as shown by Google analytics.
- The Ideas section was organized chronologically with the latest posting at the top.
- Individuals could build their own view of the site by selecting ideas and activities they might decide to follow.
- Anyone could submit an idea.
- So far only a few activities had been approved.
- Bryan Henry reported discussing with ACS staff their posting activities on the IAC-2011 website. They preferred to post them on the ACS site, so it appeared the IYC website would become a place for countries having no site of their own. One suggested strategy would be to solicit an activity from each large society that included a Web address listing their activities.
- It probably would not be wise to allow persons accessing the IYC 2011 site to be automatically become members of the site, since numerous queries would probably be generated by robot software.
- It was hoped to encourage greater use of the site. CEFIC, for example had many activities that could be posted.
- Publicizing the website might be assisted by including the URL just under the logo whenever the logo is published.

The committee congratulated Dr. Meyers on a job very well done.

4. **Outreach Committee.** Bryan Henry referred to his report which was distributed in advance of the meeting. A formal meeting of the Outreach Subcommittee was scheduled for Friday, April 16 to discuss overall communications strategy. Dr. Henry added the following:
  - An effective PowerPoint presentation of IYC 2011 had been developed. It was available for downloading from the website and could be adapted for various uses.
  - Fabienne Meyers spearheaded development of a brochure which was now available.
  - The video project would be explored next.
  - Bryan Henry and John Malin had written invited articles on IYC-2011 for a variety of publications.
  - Julia Hasler would help publicize some IYC activities through the UNESCO magazine.
  - Regarding IYC 2011 media relations strategy: Could we find some way to energize national and international news organizations like the NY Times, Scientific American, etc.? If so, we might need to look are engaging a media relations firm.
  - IYC-2011 had been described in Wikipedia.
- 5) **Inaugural Celebration – Paris – January 2011** Nicole Moreau referred to her written report, noting that the Launch Ceremony at UNESCO Headquarters was being

developed together with Julia Hasler and three organizing committees. Arrangements were almost finished except for finances

- La Maison de la Chimie was planning to participate.
- The program could not be publicized yet, but it was being developed.
- The ceremony had the personal patronage of President Sarkozy.
- Speakers would probably include the French science minister, the ICSU President from Ethiopia and Nobelist J-M Lehn.
- The intention was to emphasize that chemistry is a science of knowledge, rather than of toxic materials.
- There would be a speaker from China to discuss “Chemistry and the Progress of Civilization.”
- Events involving women in chemistry would include a talk by H  l  ne Langevin-Joliot about her grandmother and a speech by Nobelist Ada Yonath. A women’s breakfast initiative “Women Sharing a Moment of Chemistry” was being organized by Mary Garson.
- A speaker from BASF would describe global initiatives. There would also be a discussion of environment and climate issues.
- The Royal Society of Chemistry had been invited to suggest a speaker. There was no response as yet and Colin Humphris agreed to follow up.
- Humphris noted that the pharmaceutical industry in the UK had not so far been active in IYC. Nicole added, however, that in France the industry had been willing to contribute.
- The event program would also include elements of materials and space chemistry.
- There were plans for young musicians to provide a concert related to Chemistry including works by A. Borodin.
- Financing: At this point the organizers had raised 100,000 euros, including 50,000 from CEFIC, 25,000 from Dow, and 25,000 expected from Sanofi. There was hope for an additional 25,000 from BASF.
- Invitations to the opening event would be going out soon but most attendees would have to pay their own expenses. Terry Renner was asked to prepare an invitation going to most or all of the 200 countries in the UN. Probably 3 persons would be invited from each country including the President of the national chemical committee. Inviting young people was expected to be a financial challenge because it was also necessary to cover the expenses of eminent speakers, including the Nobelists.
- The organizers were considering a strategy of inviting NAOs from developing countries while asking European organizations to cover 2 people. from each country.
- It was suggested that the organizers pay special attention to countries who are signatories to the UN petition for designation of IYC-2011.
- The organizers planned to invite session chairs or choose them appropriately from among persons scheduled to attend.
- The official languages would be English and French, with simultaneous translation.
- A special person was needed to be responsible for visas. Nicole Moreau and Julia Hasler agreed to look into this and possibly request help from ICSU.

- Nicole Moreau referred to the proposal from Mary Garson for an event called “Women Sharing a Chemical Moment in Time” that would be held in conjunction with the Launch Event.
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- 6) **SAIC/FASC Meeting January 2011.** John Malin noted that an update was received from Ahmed Mohammed regarding the SAIC/FASC Meeting scheduled to be held in January 2011 in Johannesburg. A program was being developed.
  - 7) **Subcommittee on Women in Chemistry Celebrations** Natalia Tarasova reported on discussions by the subcommittee, as follows:
    - Special celebrations of the achievements of Marie Curie were planned to take place in Poland and France. Other celebrations were planned for Norway, UK and elsewhere.
    - Fabienne Meyers agreed to search the IUPAC archives for contributions that women have made to the Union. She also was working on interviewing women chemists and publishing the interviews in *Chemistry International*. Other ideas included the following: (1) IUPAC could send a questionnaire to chemical organizations asking them list women in chemistry who had contributed significantly to chemistry. (2) Children could be asked to write compositions on their best female chemistry teacher. (3) A project could be organized to list and detail career possibilities for women in chemistry, (4) the career of Lisa Meitner, who played a major role in discovering of radioactivity, should be celebrated, (5) a prize should be established for women in chemistry and (6) IUPAC should recognize women who have already won IUPAC prizes, perhaps by dedication a special edition of *Chemistry International* or another journal to their career stories, (7) IYC-2011 should coordinate with the awarding of the L’Oreal prize for women in science, noting that the 2011 prize would go to a physicist, and (8) IUPAC should encourage the Third World Academy of Sciences to recognize women scientists.
  - 8) **PACIFICHEM 2010.** John Malin reported that he had written to Prof. Alper, Chair of the Pacifichem 2010 organizing committee, with a proposal to hold a reception hosting some 800 people at PACIFICHEM 2010 to publicize IYC 2011. Prof. Alper responded that if IYC were to distribute any publicity at PACIFICHEM, IYC would be required to purchase a booth in the PACIFICHEM exposition. Malin noted that after discussion with the IUPAC Secretariat, a booth had been ordered and IUPAC would cover the expenses of a staff member to be present there. The Management Committee discussed the proposed reception. It was decided that the costs of a large reception, which could approach some \$40k, would be unacceptable and a small reception, which would cost some \$4k, would reach only officials who are already aware of IYC 2011. The committee concluded a reception at PACIFICHEM would not be effective and the IUPAC booth would be sufficient to publicize IYC 2011. John Malin will inform the organizing committee of PACIFICHEM that the proposal to hold a reception is withdrawn.

Peter Mahaffy noted a suggestion coming from the committees organizing the Global Experiment on water purification and quality. It might be possible, he suggested, to hold a

media event in conjunction with PACIFICHEM where students would be publicized sampling water in Hawaii.

**9) Congress and General Assembly, San Juan, PR, August 2011** Ram Lamba referred the committee to the written report distributed as part of the Agenda. He and others commented as follows:

- The United Nations Secretary General declined the organizing committee's invitation to present the opening address at the Congress.
- Ingrid Montez was working on a proposed Women in Science Symposium.
- A reception for Spanish-speaking scientists was proposed, to be hosted by Mario Molina.
- Fabienne Meyers asked: What are IUPAC/IYC doing specifically during the Congress, rather than in just the General Assembly? At this point there was no plan for specific activities or to have a booth in the exposition. The consensus was it would be important to make sure the Congress was branded as an IYC event.
- Ram Lamba added that the opening ceremony would feature school children dressed in the garb of their native countries. There would also be an event in which children could meet the Nobel Laureates..

**10) WCLM in Puerto Rico:** Colin Humphris reported on plans for the WCLM, a full day event on August 2, 2011 entitled "The Challenges for Chemistry in Sustainable Development". He referred to his written report distributed with the agenda materials. As noted above, it had been hoped to invite the UN General Secretary as a speaker. Although that invitation was declined, Humphris noted that the world is currently in the middle of a UNESCO-declared decade promoting sustainable development issues. The WCLM, it was expected, would implement an enhanced level of dialogue on sustainable development among the *scientific community* - represented by the IUPAC family, *Society* - represented by UN agencies and others, and the *appliers of science* - meaning industry. An initial estimate of the WCLM budget was \$100K. This was included in the fundraising budget. Committee members was noted this would be substantially more expensive than previous WCLMs. Bryan Henry suggested that the International Council for Science, which has been heavily involved in sustainable development, might help with speakers costs and with developing cooperative activities. Peter Mahaffy asked whether there was a mechanism for getting the Division Presidents involved in the WCLM. Mark Cesa suggested the Divisional Presidents could participate in the working discussions and the roundtable plenary discussions.

**11) IYC-2011 Closing Ceremony – John Malin** drew the attention of the Management Committee to Paul Baekelmans short report indicating that arrangements were on track.

**12) Unifying Event.** Peter Mahaffy discussed plans for the Global Water Experiment, as described in materials distributed with the Agenda. Next, Mark Cesa described how CCE and the global chemical industry were involved. The event was to focus on (1) global challenges in providing to potable water and (2) understanding the fundamental principles of water. A worldwide water monitoring day was proposed in which young students would measure the pH of local bodies of water. It was felt that in making

arrangements to do this, IUPAC could develop global relationships that would last long after IYC-2011.

### **13) Reports from IUPAC organizations on participation in IYC-2011.**

- Peter Mahaffy reported for the Committee on Chemical Education on a Flying Chemists Program event in Ethiopia. His written report was distributed with the meeting agenda
- Mark Cesa discussed COCI's involvement with the Unifying Event and also the fact that the Closing Ceremony would have a substantially industrial focus. COCI was also involved in several planned CHEMRAWN conferences (described by CHEMRAWN Chair Leiv Sydnnes) in fundraising for IYC-2011; in developing the IYC-2011 brochure; and in identification of industrial contacts worldwide.

### **14) Activities of Other Organizations**

- Wolfram Koch reported on activities of EuCheMs including a new book entitled "European Women in Chemistry" and other publications; on postage stamps honoring IYC-2011 and Mme. Curie; on trans-regional events such as "Chemistry Along the Rhine River" and "Chemistry on a Road through Central Europe"; and on other events.
- Natalia Tarasova described extensive plans by the Russian Federation to celebrate IYC-2011, noting that 300 years have passed since the birth of Michael Lomonosov, founder of the Russian Academy of Sciences. An IYC-2011 event was planned by the RAS in December.
- Bryan Henry described substantial plans for IYC-2011 events being organized in Canada and in the United States. He also presented a report on activities planned by the Royal Society of Chemistry.
- Nicole Moreau reported that French organizers would like to present a "molecule of the day". She was hoping to coordinate this with similar activities being organized around the world, for example in Brazil and the United States. John Malin promised to inquire with ACS about their "molecule of the day." Later, when he did so, it became clear that a unified "molecule" announcement would be difficult to coordinate internationally without sufficient staff support.
- Dr. Soon informed the committee that the Federation of Asian Chemical Societies was sponsoring activities such as an essay writing competition and an International Symposium on Women in Science and Engineering. He noted that 60% of the students of science in Malaysia are female.
- Jung-II Jin noted that Korea had set up an organizing committee for IYC 2011 with funding from the Ministry of Science and Technology. Final plans were scheduled to appear soon.
- Prof. Tatsumi noted that Japan was making steady progress. One important activity was the Natural Museum of Science. Japan was hosting the Chemistry Olympiad in 2010 and it was expected the momentum generated there would carry over to IYC 2011. A website was under construction.



**15) Ongoing Committee Operations.** The committee discussed other old and new business and reviewed ideas and items not already covered. This included the following:

- “Twinning as a concept”, an idea introduced by Peter Mahaffy that countries in the developed world might help those in the developing world to participate jointly in IYC-2011.
- Staffing as a Management Committee recommendation. Terry Renner, Sean Corish, Fabienne Meyers and David Black promised to discuss staffing needs and report back to the committee on how the IUPAC Secretariat could develop sufficient staffing to take advantage of the opportunities afforded by IYC-2011.
- The use of several new videos produced by the Center for Visualization of Science.
- Involvement of the Chemical History Foundation in IYC-2011.
- A Request for RSC to ask the BBC to produce a series of documentaries about chemistry. It turned out this had been done. The syndicable series was called. “Chemistry, a Volatile History.”

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#### **November 2010, Meeting at IUPAC Headquarters, Research Triangle Park, NC**

##### **1) Review of Action items list from the Sofia Meeting.**

- a) Staffing needs.** Terry Renner noted that the workloads of several Secretariat staff members were being reorganized to provide support for various IYC tasks and projects coming up. He said that while he couldn't predict the future workload exactly, he expected to be able to meet any demands that might arise.
- b) Website postings by large societies.** Fabienne Meyers noted that “Activity” postings listing the IYC operations of each large society are being solicited.
- c) Publication of IYC activities by UNESCO.** Julia Hasler said that IYC activities are being included in UNESCO publications. An entire issue (May 2009) was devoted to chemistry and the new magazine *UNESCO Courier* would also feature IYC 2011 when the opportunity arose.
- d) RSC Speaker at IYC Launch.** Colin Humphris reported that he had contacted RSC about a speaker for the launch ceremony.
- e) UNESCO help with French entry visas.** Julia Hasler said that UNESCO staff were helping by providing invitation letters for persons coming to France for the launch event.
- f) IYC Publicity materials to support the Curie celebrations and for use at the Third European Chemical Congress.** Fabienne Meyers noted that some materials had been developed and more were in process.
- g) Identifying women who have been prominent in IUPAC.** Dr. Meyers said she had looked into the IYC archives and found images slated for use in the March issue of *Chemistry International*.
- h) PACIFICHEM.** John Malin said that he had informed the PACIFICHEM organizers that IUPAC would not sponsor a reception.

- i) **Funding for the Closing Event.** Paul Baekelmans reported on the closing event in the course of this meeting (see below).
- j) **“Molecule of the Day”** John Malin noted that it wasn’t clear how this could be organized and who would take responsibility. He reported that he had talked with Terry Taylor of ACS who would be interested in receiving a specific plan. Nicole Moreau said that people at the French Chemical Society were interested in having a coordinated list of molecules worldwide. She had also spoken to David Phillips at RSC who voiced interest in the project. What was needed, she said, would be a list of molecules and a short, interesting vignette about each one. Coordinating this effort on the web was seen as one of those extra duties that would need to be carried out by the Secretariat. The suggestion was made that the list might be placed on the website as an IYC activity.
- k) **Sept. Conference Call notes.** John Malin referred to the notes which have been posted on the Management Committee discussion forum. They were not discussed further.

2) **Fundraising** Prof. Corish provided an update.

- This week an important fundraising goal was achieved when Dow became a global partner.
- The launch and closing events were successfully engaging in their own fundraising. Thus, little of the funds raised by IUPAC would be required, although some costs would arise from the Puerto meeting.
- The committee recommended that \$150k be set aside to help fund the Global Water Experiment.
- The committee was still negotiating with three potential donors, whom he did not wish to name publicly.
- Paul Baekelmans noted that Dow, DuPont and BASF were sponsoring the Closing Ceremony. Sean Corish added that IYC-2011 is trying not to ‘double dip.’ Baekelmans added that approaching pharmaceutical firms had been difficult because they don’t want to be identified with chemistry. Nicole Moreau said that for the opening ceremony those firms had contacted her. She urged the use of personal contacts.
- Colin Humphris noted that there is need to acknowledge formally all the sources of funding, including those for “cornerstone events”. Sean Corish noted that he had begun compiling that list, partly in hopes of being able to “lever up” those donors. Some potential sponsors are being saved by Brussels organizers as a “second line”.
- David Black added that, as chemistry is the basis for all pharmaceutical formulations, one would need to make the case that IYC-2011 is good advertising for pharmaceutical companies, especially in Puerto Rico where many of them have established plants. Gabriel Infante noted that Pfizer, Waters, and Agilent were Congress sponsors.
- It was pointed out that the Website has the sponsors’ logos prominently displayed.
- Paul Baekelmans pointed out that there undoubtedly would be many ‘in kind’ contributions that may never be known, but in some cases where they are identified they might be listed as activities.
- The committee expressed hope the Global Water experiment could be supported in the amount of \$150k

### 3) **Formal Record of Events & Follow-up by the Management Committee**

John Malin noted that it would be important to remember and, wherever possible, build on what IYC-2011 has accomplished. For example, having established a relationship between UNESCO and IUPAC, and having built relationships with sponsors and industry one should think about how to maintain these partnerships. Committee members shared their thoughts:

- With the intention of providing momentum to chemistry in the years following IYC-2011, one should be thinking about a position paper and a formal report. It might be coordinated through the Bureau.
- Julia Hasler added that such a report would need to be referred also to the UN General Assembly. In that would lie the possibility of having all the IYC-2011 work formally recognized. She believed the new Asst Director for General Sciences at UNESCO would be very interested.
- The report would need to include a critical assessment. A small task group among the Management Committee should continue to work on this.
- IUPAC could produce a special IYC-2011 summary as its biennial report.

### 4) **Inaugural Celebration.** Nicole Moreau and Julia Hasler showed the cover of the brochure for the launch ceremony and described the program as shown in the document. Julia Hasler noted that the UNESCO Director General and a Minister would be highlighted in the program. She showed the physical layout of UNESCO and discussed the arrangement of booths for the Global Experiment and the chemistry of climate change, the showing of video clips and other features of the exposition.

- Invitations were being sent out. Typically it was felt necessary to send out 3000 to get 1000 responses. So far, one-half of the room was reserved, but 400 seats remained available and about one-fourth of NAO's had not responded. Some 300 more replies were expected from NAOs by the end of registration. Committee members noted there was a need to follow up. Paul Baekelmans requested a copy of the invitation list.
- Young people responded very well but for them the biggest difficulty was funding the trip. Dr. Moreau said that chemistry students from the Grandes Ecoles could welcome some students in their homes.
- Peter Mahaffy suggested holding a panel at the end to discuss "The Role of Chemistry in Addressing Employment, Environment and Education."
- Jung-II Jin has contacts with Bangladesh chemical society. He suggested the current President could speak on water problems in Bangladesh.

5) **Marie Sklodowska-Curie and Women in Chemistry Celebrations**

Natalia Tarasova discussed the Marie Sklodowska-Curie celebration scheduled for the Sorbonne on January 29, the day after the Inaugural Event. She noted several international congresses, commemorative medals, stamps and special issues of journals recognizing Mme. Curie.

- **Women Sharing a Chemical Moment in Time.** Prof. Tarasova reported there was interest from 11 countries in participating in this e-linked event. In December the communication plan was to be put in place linking breakfasts in various nations. The website for Brisbane (Australia) could serve as a model for other countries. Mary Garson, she said, was working on a list of topics to be suggested for the discussions. Recorded materials were to be sent to UNESCO and video materials were expected to be prepared. Some organizational help from the IUPAC Secretariat would be needed. Dr. Garson also requested help identifying contacts in China, Africa, Central and South America.
- **Educational Resources on Women in Chemistry.** A biography of Ada Yonath was in preparation. Ingrid Montes was planning to organize a special symposium at the Puerto Rico meeting, devoted to Women in Science. A Project Proposal on Marie Curie and women in chemistry was being prepared. Plans were expressed to create a biographical database and website recognizing the many women who have contributed to the sciences in order to make them known to young people, boys and girls alike, through accessible and reliable information.
- **Women in IUPAC** – Fabienne Meyers was working on a compilation for a special issue of *Chemistry International* in January 2011.
- **Other Items:** It was suggested that women CEOs of chemical corporations should be featured as role models. Wolfram Koch noted that EuChemS was preparing a book of biographies of European Women in Chemistry.

6) **PACIFICHEM 2010.** John Malin reported that IUPAC would have a booth at the forthcoming PACIFICHEM meeting. The booth would feature a high-resolution video describing the Global Water Experiment. A reception organized by ACS and recognizing IYC-2011 was scheduled.

7) **World Chemistry Event** Peter Mahaffy outlined the IYC-2011 unifying event, the Global Water Project. He noted that a tremendous effort had gone into the project but a huge amount of work remained to be done. Since the global event would include an unprecedented convergence of individuals, NGOs, industry and educational institutions it would be a great opportunity for formation of intellectual partnerships. Mahaffy asserted that Chemistry's greatest single contribution to humankind could well have been to make pure water available to the world.

In describing the global water project, Dr. Mahaffy listed four component modules being constructed:

- 1) Measure acidity of natural waters worldwide using indicators or meters
- 2) Use a homemade meter to measure salinity
- 3) Demonstrate filtration of water
- 4) Purify water using solar energy

Results from countries around the world would be posted on the Internet. Web based tools would be located at [www.chemistry2011.org/water](http://www.chemistry2011.org/water)

Mahaffy discussed the budget, timeline and sponsorship for the project, noting that the event would be an opportunity for positive corporate exposure. There are companies in the water industry, he noted, who might not get involved with other kinds of chemical experiments but who would find this one attractive. Someone at Dow, he said, wished to coordinate activities in Africa.

Comments on the global water event were as follows:

- It would be important to keep the event's legacy and conclusions in mind.
- Mark Cesa noted that other water experiments are already going on in the USA and elsewhere. Representatives talked in August with ACS, asking for their support. ACS was quite enthusiastic about the global water experiment, hoping to involve involving as many people as possible in the activity.
- Wolfram Koch pointed out that the monitoring situation is different from country to country. Germany would have more sophisticated kinds of indicators, for example, than countries in the developing world. The range of pH measured would be within plus or minus 1 pH unit, leading perhaps to wildly disparate results with pH paper.
- Paul Baekelmans suggested the project should be defined as taking place over a three-to-five year term.
- Key partners would be the science teachers, their professional associations and school networks. In the United States, the National Science Teachers Association was already acquainted with the project.
- A person at the IUPAC Secretariat would be needed as a point of contact for administration. The person could be helping with other IUPAC-related tasks. Salary would be approximately \$50,000/year.
- David Black suggested making a more detailed proposal to the Executive Committee, after getting approval from the IYC Management Committee.

*It was MOVED and unanimously PASSED that the global experiment be ratified in principle, and that the team drafting it be requested to present a proposal incorporating a more detailed budget to the Executive Committee with a request for funding.*

**8) World Chemistry Leadership Meeting (WCLM) Planned for the Congress and General Assembly in Puerto Rico.**

Colin Humphris referred to his written report. He noted that invitations to speakers had gone out. No formal responses had been received but it was thought the UNESCO Deputy Director for Science might accept. In addition to speakers from a particular companies, the organizers hoped to attract other scientists who could contribute to the discussion. For the afternoon session discussions would replace the usual ‘roundtables.’

9) **Congress and General Assembly - San Juan, PR.** John Malin provided an update send in writing by Gabriel Infante.

10) **Closing Ceremony – Brussels** Paul Baekelmans updated the Management Committee on plans for the Closing Event, which were well advanced. He noted the following:

- Sponsors included Dow, BASF, GSK, Solvay, DuPont, Janssen Pharmaceutica and CEFIC.
- Brussels has a long tradition of science. Chemists in Belgium are about 1% of the population. The International Solvay Institute was formed in 1913.
- There would be an interactive morning session at the Closing Ceremony including presentations by ‘young professionals’ from the chemical industry followed by general discussion engaging the attendees. The overall topic would be “Perception of the World in 2050,” by which time the population of the world would be expected to reach nearly 10 billion. One topic under discussion, medicinal chemistry, would show the fundamental role of chemistry in dealing with tuberculosis, typhus, dysentery, cholera, malaria and HIV infections..
- Distinguished speakers planned for the afternoon included President Nicole Moreau, Ada Yonath, and Jean-Luc Brédas.
- The program, which would feature an OXFAM representative was also intended to focus on ethnic diversity.
- Dr. Baekelmans displayed a new Belgian stamp that had been created in honor of IYC 2011.

11) **IYC 2011 Outreach.** Bryan Henry briefly discussed the history of the Outreach Subcommittee, which was looking into all manners of publicizing IYC-2011 to the chemical community. It had, at the outset, helped develop the PowerPoint presentation and brochure.

- **Website.** Dr Meyers announced huge increases in visits to the website, for example, 29,560 visits in Jul-Sep 2010. There were 2422 individual contacts, 133 nodes, 149 ideas, 195 activities, and 45 countries with activities. She discussed priorities for updating the site. Peter Mahaffy noted that having a website which is flexible allows one to follow up, but also requires continual updating by the operators.

- Natalia Tarasova inquired whether it would be desirable to show national plans for IYC 2011 on the site. Fabienne Meyers answered affirmatively, with the proviso that if there were many activities an extended set of keywords would be necessary.
- Colin Humphris said that when he visited Brussels recently he received positive feedback about the site, but there was some criticism of the map. Users of the site said that after clicking on a country they would like to gain access to all its activities.
- Bryan Henry addressed the subject of videos, noting that the committee had originally dreamed of making an IYC video from scratch but, since this approach was too expensive, IYC-2011 was now looking for video material produced by others. It was hoped to create a prominent section of the IYC-2011 website with links to videos that already existed. These could include a video from Sweden, a series from ACS; the Center for the History of Chemistry video “100 Greatest Discoveries in Science”; and DuPont’s video “The Discovery of Nylon.” He noted the ICCA had suggested making a video about the water experiment, showing children carrying out the procedures.
- It was noted that the European Petrochemical Association was making a 3-minute film, that RSC had produced many videos about chemistry, and that there existed several videos about the life of Mme. Curie. All these could potentially be mounted on the Website and it was hoped the IUPAC Secretariat had the resources to do it. Finally, creation and promulgation of a list of chemistry-related videos, available on YouTube for example, was suggested for use as an educational tool.

12) **Committee on Chemical Education (CCE)** Peter Mahaffy referred to his a 61-page report, discussing in part the importance of visualizing the science of climate change. He noted the importance of getting good interactive web –based materials into the hands of 16-19 year olds. Many persons, he said, are asking whether climate change is really happening. RSC has an informative document “How is 800,000 years of temperature data determined from Ice Core Samples?”

Mahaffy noted the CCE is highly interested in IYC-2011 particularly regarding how IYC 2011 might enhance the role of chemistry for sustainable development. The Global Experiment had already been addressed (see above) and Prof. Mahaffy volunteered to follow up with Nicole Moreau and Julia Hasler on how the Global Experiment would be covered in the Launch Ceremony. Mahaffy reported that many creative ideas for new projects have surfaced, including 1) developing toolkits for National Chemistry Week in countries that don’t already have sustainable celebrations; 2) reinforcing the idea of chemistry as a cultural enterprise; 3) designing toolkits for National Chemistry Week; 3) trying to encourage IYC activities in places where they don’t have regular annual celebrations of chemistry; 4) bringing chemistry students to the closing ceremony in Brussels; 5) the Flying Chemist program; and 6) the isotopic Periodic Table project. Substantial funding had been raised for these projects, noted Prof. Mahaffy, but more was needed to complete them. Germany, the RSC and UNESCO were all helping, he said.

13) **Committee on Chemical Industry (COCI)** Mark Cesa encouraged all present to read the positive report from Michael Droescher. He noted that COCI is “imbedded” in IYC-2011 and thanked Paul Baekelmans and his committee for excellent work organizing the Closing Event. He added that COCI is involved with planned CHEMRAWN conferences scheduled to be held during 2011.

14) **CHEMRAWN** Leiv Sydnnes reported that CHEMRAWN XIX: “Renewable and Sustainable Energy from Biological Resources” was scheduled to be held under the rubric of IYC-2011 on September 27-28, 2011, in Kuala Lumpur. Also, the Malta V conference “Frontiers of Science: Research and Education in the Middle East – A Bridge to Peace.” was planned for December 4-9, 2011 at UNESCO Headquarters in Paris.

#### 15) **Activities of Other National and International Organizations**

Wolfram Koch listed the following activities in Europe:

- EuCheMS was producing a book edited by Jan Apotheker and Livia Simon Sarkadi entitled “European Women in Chemistry.” Another volume to be published in 2011 was “The Chemical Element: Chemistry’s Contribution to Our Future”, edited by Javier Garcia-Martinez and Elena Serrano-Torregrosa.
- GDCh was joining in production of a calendar for 2011 called “Everything is Chemistry.”
- Arrangements had been made for the IYC banner to decorate the European Commission building for one week.
- The Royal Society of Chemistry was developing an exhibition called “Children and Water.
- Many European websites for IYC-2011 were listed on the recently launched [www.euchems.org/iy11](http://www.euchems.org/iy11) The site featured European events and activities and provided information for sponsorship.
- Koch provided a selection of National Highlights for IYC-2011. There were many, he said, and the chemical industry was highly involved.

#### 16) **Activities in Canada, the United States, Asia and Latin America.**

- Bryan Henry informed the committee there was a Canadian website and that an IYC-2011 postage stamp would be issued in Canada during 2011.
- Prof. Henry added that US activities were listed on the ACS website. He noted that American Chemical Society would provide \$75,000 in support of the forthcoming Congress and General Assembly in Puerto Rico. ACS activities in support of IYC-2011 included two National Meetings, nine Regional Meetings the Pre-launch reception at PACIFICHEM, a celebration entitled Super Science Saturday, and an activity named “Elemental Matters” in which artists could exhibit their concepts of chemistry. This was only a partial list, he said, a small subset of what was planned.



- Mark Cesa added that ACS was also carrying out activities connected with chemistry in the environment, energy, materials and health, under the auspices of its Committee on Community Activities.
- Malin informed the committee on activities of the Federation of Asian Chemical Societies, based on written material received from Prof. Soon.
- Malin provided an update on activities of the Federation of Latin American Chemical Societies, based on written material received from Prof. Infante.

17) **Other Subcommittee Activity.** Three subcommittees (Fundraising, WCLM and Outreach) met at IUPAC Headquarters on the following day, November 5, 2010.

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### **Closing Management Committee Operations**

On April 22, 2011, Terry Renner, IUPAC Executive Director, wrote to Management Committee Chair John Malin informing him that the IUPAC Executive Committee had voted on 10 April to eliminate support for the committee since its work was completed. While organization of the “cornerstone” events was essentially complete, members of the Management Committee felt some responsibility to produce a final report that might help support the legacy of IYC 2011. John Malin polled the members of the committee regarding their availability during the Congress and General Assembly to be held in Puerto Rico in June, 2011. A substantial number of the members were planning to be at the Congress and General Assembly and favored a meeting. Although, the time slot available was inconvenient for some, an informal meeting was held in which those members present voiced their opinion that a final report on IYC 2011 should be written.

Bryan Henry agreed to follow up. Ultimately this led to a Project Proposal and the formation of a new committee to produce the Final Report. This was entirely consistent with the statements made by IUPAC Vice-President Kazuyuki Tatsumi in his Vice President’s Critical Analysis, appearing in the IUPAC Council Agenda for its meeting in June 2011:

*“We have been witnessing the increasing enthusiasm of chemists through the activities of IYC2011, and this certainly gives IUPAC the momentum as a world leading organization for chemistry and for science. The immediate benefits of IYC2011 are to lift the visibility of chemistry and the reputation of IUPAC, to bring forth fresh ideas from the young generation and from the IUPAC itself, and to strengthen the link between IUPAC and chemical communities worldwide.*

*“Taking the advantage of the success to date of IYC2011, I am looking forward to building a promising future for IUPAC as it advances the worldwide role of Chemistry through excellence in science and innovative technology. We have so much to offer, with the participation of talented chemists from all over the world, the possibilities are endless. For one thing, we expect to recruit fresh ideas and enthusiasm from the next generation into the field of Chemistry. For another, the IYC2011 is expected to provide a wonderful opportunity to strengthen the link between IUPAC and chemical communities throughout the world.”*

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### **Management Committee Chair's Acknowledgements and Critical Assessment**

The Chair would like particularly to thank the many individuals who worked to make IYC 2011 a success. All members of the Management Committee are thanked for their enormous time and efforts. Kudos go to Fabienne Meyers, who was invariably helpful, especially taking charge of the IYC 2011 Website and development of the logo. John Jost's and later Terry Renner's assistance along with other dedicated IUPAC staff was of great importance. Bryan Henry acted as an indispensable prime mover in starting IYC 2011 and later as Public Relations subcommittee chair. Peter Mahaffy did an outstanding job working with Julia Hasler and colleagues at UNESCO and from the Ethiopian Delegation to UNESCO in the crucial effort to have 2011 declared the International Year of Chemistry at the United Nations. Peter Mahaffy, Mark Cesa and Javier Garcia Martinez performed outstanding work organizing and publicizing the Global Water Experiment. Mark Cesa, along with Colin Humphris was exceedingly helpful liaising with the chemical industry. Natalia Tarasova helped by organizing the Roundtable Discussions in Glasgow and chairing the subcommittee on women chemists. Nicole Moreau, Gabriel Infante, and Paul Baekelmans made immense contributions, respectively organizing the Opening Ceremony in Paris, the Puerto Rico events and the Closing Ceremony. Kaz Tatsumi was enormously helpful at all stages and Sean Corish energetically headed the Fundraising subcommittee.

Considering potential improvements that might help other organizations organizing international years to equal or even more successful outcomes, one notes the following:

- 1) If, on appointing the Management Committee, the Committee's terms of reference, goals and the actual membership had been specified at the outset, it might have been possible to bring the committee's work up to speed more quickly. Also, as IYC 2011 proceeded, members of the Management Committee felt a strong responsibility to produce a final report and evaluation of the International Year, but the committee was disbanded in mid-2011 before that goal could be addressed.
- 2) It would have been useful to designate a staff member whose sole responsibility was the International Year. Assurances that "someone" would be made available to handle the myriad tasks that came up, and to follow up on the many creative ideas that occurred were not completely fulfilled. This may have led to a kind of self-censorship in which some tasks or ideas were simply dropped.
- 3) IYC 2011 benefited substantially from the hard work of the Fundraising Subcommittee lining up donations. In addition, some companies and other sources contributed directly to the earmarked "cornerstone" events such as the opening and closing ceremonies and the Global Water Experiment. Given the importance of the chemical sciences in meeting world needs in health, materials, energy and agriculture, an event like IYC 2011 seemed likely to be a relatively "easy sell". While crediting the energetic and capable work of the Fundraising Subcommittee, one feels that the effort might have been even more successful with the additional advice and experience of a professional fundraiser.

From the point of view of the Chair of the IUPAC Management Committee, IYC 2011 was a wonderful experience, never to be forgotten. Not least among the many excellent outcomes obtained, the International Year of Chemistry 2011 clearly enhanced the public image of chemistry around the world by catalyzing the active and creative participation of the global chemistry community.