

Break Out Session: New Initiatives and Projects to Consider

1. *Advances in Chemistry Education program in Torino, August 2007.*

Peter Mahaffy has proposed to the organizers of the Torino GA and Congress the reading of a provocative new play by Roald Hoffmann, entitled "Should've." This was read for the first time as part of a visit by Prof. Hoffmann to Edmonton, Alberta, Canada and the first stage reading of this new play at the King's University College in Edmonton, following three days of workshops with professional actors, a director, and dramaturge. One possibility discussed with Hoffmann is to use a reading of the play in Torino to catalyze a discussion (symposium?) about ethics in science, from a chemical perspective, and the social responsibility of scientists, under an IUPAC aegis.

2. *UN Decade for Education for Sustainable Development (Tarasova)*

Projects and activities centred around this theme have been carried out, including several initiated by Tarasova at Mendeleev University in Moscow. What other initiatives relevant to IUPAC's role might form the basis for a new project or activities?

3. *Code of Conduct for IUPAC (Hay, Mahaffy)*

A new project is coming forward under the leadership of Graham Pearson, Alastair Hay and others as a follow up to IUPAC projects 2004-048-1-020 and 2005-029-1-050. The purpose of this project is to create an IUPAC code of conduct. From a preliminary draft of the project proposal by Pearson: "An IUPAC code would recognise the extraordinary benefits to the quality of life, public health and agriculture throughout the world made available by the knowledge, methods and techniques in science and technology using chemicals. It would promote all aspects of chemistry, not just among members of the profession, but increasingly to the worldwide community.

While chemistry can greatly improve the quality of life, we recognize both the potential and power of chemistry, and acknowledge that it should be approached with an appropriate mixture of enthusiasm and sensitivity to social issues. While chemistry provides many valuable benefits for humankind, it can also raise important ethical issues. These issues can evolve as more development and uses of chemistry occur and a code of conduct would provide a framework within which to consider such issues.

While some principles relating to science and technology using chemicals are codified in international treaties, national legislation, statutes and regulations, the IUPAC code of conduct is intended to provide guidance to all those using chemicals that goes beyond legal requirements."

4. *The program and activities surrounding the 20th ICCE, Mauritius, 2008 and the associated satellite meeting, likely in Nairobi. (Ramasami)*

One of our CCE goals is to tie in much more closely activities and projects with the ICCE meetings. A project could be based on this – and perhaps a project could relate to preparing a one-day workshop that would meaningfully meet the needs of Kenyan Chemical Society in a satellite meeting.

5. *Year 2009 as a Year of Chemistry (Tarasova)*

Tarasova has reminded us of this proposal to create a year of chemistry in 2009. How might we tie into this – perhaps leading up to it in some way in what we do in Mauritius, 2008?

6. ***Flying Chemists Program (Chiu, Mahaffy)***

In the minutes of our CCE 2006 Strategy Meeting ([CCE2006_3_strategyminutes_2006](#)) you will find some suggestions for ways to integrate the Flying Chemists Program more fully into activities of the Chemistry Education for Development subcommittee and CCE. It would be most helpful to discuss this further. A query has come in about an FCP visit to the Philippines, which has received a response from the chair.

7. ***Nanotechnology for Schools (Alan Smith, COCI, with a CD sent to Ashmore, Mahaffy)***

June 26, 2006 request from Alan Smith,

In my retirement, I am spending 3 days a week on nanotechnology for the UK Government. Part of what I am doing is keeping people aware of what nano can do for them. This is either through awareness packs for industry sectors, or lectures at all levels. After the nano article in Chemistry International, I have lectured on nanotechnology in Sport and Leisure at Manchester United Football Club and at a 'Materials for Sport' conference in Wurzburg, Germany. In September, I am giving a public nano talk to City of London people through Gresham College, which will be attended by the general public, lawyers and financiers. I have also just sent another nano article off to Fabienne entitled '*Mother Nature - the Nanotechnologist*'.

At a COCI meeting I showed some of the slides I use, and Alex Pokrovsky asked if they were applicable to 10 year olds, since he thought there was UNESCO money for this. Clearly we would like CCE involvement, or leadership. In the meantime, I will put something together as a 'taster' for Alex and copy you in.

Kind regards.
Alan

8. ***Base Coordination of Projects for Delivery of Chemical Education on the Internet***

July 31, 2006 message from Glasser, chair of IUPAC's Committee on Publications (CPEP)

Dear Dr Mahaffy:

At the recent CPEP meeting in Berlin, committee member Dr Rene Deplanque (director of FIZ-Chemie, Berlin) drew our attention to the need for base coordination of the many projects currently in progress for delivery of chemical education on the Internet. He mentioned in particular the FIZ-Chemie project 'Chemgaroo' (http://www.fiz-chemie.de/en/aktuelles/report_en.pdf), and efforts that he is involved in to coordinate. I am writing to you in order to bring these considerations to your attention. More detail can, of course, be obtained from Dr Deplanque himself (deplanque@fiz-chemie.de).

Leslie Glasser (Chair, CPEP)
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9. *Educational Materials Page on IUPAC website (Chorghade, Duffus – Division VII)*

Dear Professor Mahaffy:

I look forward to my collaboration with you on the committee. I am forwarding an excellent suggestion by Professor Duffus, Division VII.

Kindest regards and best wishes

Mukund S Chorghade

----- Original Message -----

From: "John Duffus" <j.h.duffus@blueyonder.co.uk>

To: "Mukund S. Chorghade" <chorghade@comcast.net>

Cc: "Paul W. Erhardt" <PErhard@UTNet.UToledo.Edu>

Sent: Tuesday, April 25, 2006 5:21 AM

Subject: Division VII Educational Activities and CEC

> Dear Mukund

>

> I wonder whether you could suggest to CEC that it might be a good idea to

> have an educational materials page on the IUPAC website. Education is a

> major IUPAC activity and we produce a lot between us but there is no

> unified place on the IUPAC website where everything is brought together.

> I should like to see in the Site Index a heading "Educational Material"

> or even "Chemical Education" or perhaps "Distance Learning". This should

> lead to a page describing IUPAC's educational activities in the widest

> sense and provide links to IUPAC output such as "Essential Toxicology",

> glossaries etc.

>

> I have done my best to publicise IUPAC's activities in this area but

> there is a need to make it more obvious on the web.

>

> Best regards.

>

> Dr John H Duffus

> 43 Mansionhouse Road

> Edinburgh EH9 2JD

> Scotland, U.K.

10. *Web Initiatives for Polymer Education (Dick Jones)*

Thanks very much, Dick, for the update on Polymer Div activities, and for passing on the URL for the impressive educational materials Chris Ober has already assembled.

CCE does indeed have an interest in this educational initiative, and Choon Do and I as CCE members of the Polymer Division Subcommittee on Education would like to stay informed and assist as we're able. I've also copied Prof. Eva Åkesson, our CCE Division Liaison Officer, so she is aware of these developments.

Several suggestions to consider to make the individual movies and downloads links more accessible to teachers unfamiliar with polymer chemistry. Might it be helpful to have a paragraph under

"Exploring the World of Plastics" summarizing the importance of polymers, describing the range of topics for which animations are available, and perhaps also the educational level at which they might be introduced? On the downloads and individual movies pages, teachers would greatly benefit from some accompanying notes of explanation and perhaps a reference or two for each animation, so there is some context.

I expect this may be in the works, but thought I'd pass on some early feedback.

We'll look forward to working with you.

Best regards,
Peter Mahaffy

> On 8 March 2006, Dick Jones wrote:

>> (2a) At the Beijing division meeting it was agreed that an
>> educational link directed to final year high school students, their
>> teachers and to undergraduates interested in polymer science be
>> established on the front page of the division website. It is still
>> under development, led by Chris Ober, but even at this stage it
>> would be very useful if the link was put in place. The address it
>> would access is:
>>
>> <http://people.ccmr.cornell.edu/~cober/IUPACWebsite/index.html>
>> <<http://people.ccmr.cornell.edu/%7Ecober/IUPACWebsite/index.html>>
>>
>> If you explore the site you will see that it includes a link in the
>> opposite direction which will bring new people to the world of
>> IUPAC. It is entirely user-friendly but on our webpage I think we
>> have to wrap it in some appropriate words to attract our own
>> customers to use it. How about extending the green banner to the
>> right and embedding the link in something like the following: Here
>> is access to a series of downloadable, easy to follow video clips
>> for introducing newcomers to the fascinating world of polymers.
>>
>> (2b) Also at Beijing we agreed (minute 15.4) that
>> a two-way link of the Division's webpage and the web page
>> of 'e-polymers' (<http://www.e-polymers.org/>) would be to our
>> advantage. Amongst other advantages, this would give task group
>> leaders ready access to a fully electronic journal that could be
>> used within our public review processes. It carries the advantage of
>> rapid dissemination of information. Prof. Stanislaw Penczek, who is
>> a titular member of Division IV, is one of the Editors-in-Chief and
>> has offered this facility on behalf of the journal. He also agreed
>> to progress the establishment of the link back to IUPAC and if you
>> access the site you will see that this has already been done.
>>
>> All good wishes,
>>
>> Dick

11. *Wet Surface Vibrational Spectroscopy in Teaching Contexts (McQuillan, Division I)*

April 2006 message from McQuillan

Dear Peter,

I will next weekend be attending a Division I Committee meeting in Coimbra, Portugal. I have taken over the Division I representative role from Chris Brett but so far have not made any contribution to CCE.

It is likely that we will be considering a Division I project related to the promotion of wet surface vibrational spectroscopy in teaching contexts, which is likely to be referred to your committee in the review stage. ...

Yours sincerely
Jim McQuillan

12. *Second Review Conference of the Chemical Weapons Convention*

This is currently under consideration by OPCW and IUPAC, and concerns about education and communication with a role for CCE have been highlighted in our current projects related to the CWC.

13. *Interactions with International Council of Chemical Associations (ICCA) Over Public Understanding of Chemistry and Capacity Building*

ICCA (<http://www.icca-chem.org/>) “is the world-wide voice of the chemical industry, representing chemical manufacturers and producers all over the world. It accounts for more than 75 per cent of chemical manufacturing operations with a production exceeding USD 1.6 trillion annually. Almost 30 percent of this production is traded internationally. ICCA promotes and co-ordinates Responsible Care and other voluntary chemical industry initiatives.

ICCA has a central role in the exchange of information within the international industry, and in the development of position statements on matters of policy. It is also the main channel of communication between the industry and various international organizations that are concerned with health, environment and trade-related issues, including the United Nations Environment Programme (UNEP), the World Trade Organization (WTO) and the Organisation for Economic Co-operation & Development (OECD).”

Following the joint IUPAC/OPCW workshop in Oxford, further informal discussions about points of interaction between IUPAC and ICCA have been held, centred around areas such as:

Encouraging young people into chemistry, public acceptance of synthetic chemical products, addressing new and emerging issues

Interactions and perhaps projects with CCE – CED over ICCA and capacity building and with CCE – PUC over public understanding would clearly be desirable. Points of contact would be Leiv Sydnnes from IUPAC, Mark Cesa – Chair of COCI, and Alain Peroy – CEO of CEFIC.