

IUPAC COMMITTEE ON CHEMISTRY EDUCATION
Meeting at 20th ICCE, 2008
Mauritius
MINUTES

Meeting time: Sunday, August 3 9:00–12:30 and 14:00–17:30

Meeting place: Business centre room Bel Air at Le Meridien Hotel

Meeting time: Wednesday, August 6 – 17:30 19:30

Meeting place: Business centre room Bel Air at Le Meridien Hotel

*Please note that instructions for downloading the supporting materials listed in parenthesis after some items are available on the IUPAC CCE bulletin board,
The agenda files themselves will be at:
<http://media.iupac.org/standing/cce/agenda0808/>*

1. Welcome, introduction and orientation [CCE2008_01]

Welcome from the chair, Peter Mahaffy, to everybody. It is nice to see new and old friends, and it is a really good turn out for this meeting. Thank you all for coming.

Logistics:

The agenda and supporting material are available on the web and hopefully everybody have printouts. Otherwise the material will be shown on the screen during the meeting. The meeting will take place today, Sunday and on Wednesday. Coffee breaks will be at 10:30 and 3:30.

Wednesday meeting: time and place will be announced later today. Some people will only attend the meeting on Wednesday.

Purpose of the CCE meeting:

Take ideas and translate them into projects and to achieve concrete action. It is helpful to work in groups. We will readily go through the agenda, and then form small groups, 4-5 groups, with the outcome of a couple projects in the end of the week.

Agenda approved.

A brief introduction of all participants.

Attending Sunday 3rd August:

TM:s

Peter Mahaffy – chair, Eva Åkesson – secretary, Mei-Hung Chiu, Mustafa Sözbilir, Lida Schoen.

NR:s

Morton Hoffman USA, (conference coordinator), Erica Steenberg (South Africa), Liberato Cardellini (Italy), Farouk Fahmy (Egypt), Phillipe Boesch (Switzerland), Tony Wright (Australia) Christiane S. Reiners (Germany) (from 2 o'clock) Masahiro Kamata (Japan),

Quests:

Colin Osborne - RSC , John Bradley, South Africa – ex officio, Anthony Ashmore, UK
Alex Pokrovsky – IOCD, Alastair Hay, Janusz Lipkowski, Poland

Attending Wednesday 6th August:

TM:s

Peter Mahaffy – chair, Eva Åkesson – secretary, Mei-Hung Chiu, Mustafa Sözbilir, Lida Schoen,

NR:s

Morton Hoffman USA, (conference coordinator), Erica Steenberg (South Africa), Liberato Cardellini (Italy), Farouk Fahmy (Egypt), Phillipe Boesch (Switzerland), Tony Wright (Australia) Christiane S. Reiners (Germany) Masahiro Kamata (Japan),

AM:s

Richard Hartshorn – Div VIII

Guests:

Marcy Towns (USA), Anthony Ashmore (UK), Alex Pokrovsky, (IOCD) (Mei Hung guest name?), Johan Reimer (Sweden), Ito (Japan), Ilka Parchmann, Colin Osborne (RSC) John Bradley, South Africa – ex officio, Alastair Hay (guest)

Regrets:

Uday Maitra (NR India), Shelley Wilks Geehr (CHF), Kristina Edström, (NR Sweden), Jim McQuillan (AM), Mary Garson (AM), Peter E. Childs (NR Ireland), Ludo Brandt (NR Belgium), Javier Garcia Martinez (AM), Mark Cesa (ex officio) Mordechai Livneh (NR Israel), Natalia Tarasova (TM), Ram Lamba (TM)

2. Minutes of meeting in Torino, Italy, August 2007 [CCE2008_02]

Minutes approved.

3. Minutes of strategy meeting in Philadelphia, USA, January 2008 [CCE2008_03]

PM gave an overview of the intention of and the outcome from the meeting.

Minutes noted.

4. Matters arising from the minutes of CCE and strategy meeting and new business

To consider matters arising that are not on the agenda

Added to the agenda:

8.4 Update on DIDAC, Alexander Prokovski

5. Chair's report to IUPAC Bureau [CCE2008_05]

Please note in particular, Item 3, CCE priority areas for 2008-09. We will discuss whether this listing adequately reflects our priorities, actions taken in these areas, and how we can concretely implement new activities and projects in each of these areas.

PM gave a brief overview and emphasized the highlights from the Chair's report to the IUPAC Bureau. Particular attention should be paid to the six priority areas for 2008-2009, some are the same, some other new, and others have another twist.

A lengthy discussion followed with several ideas and initiatives to proceed in the group discussions.

Priority areas for 2008-2009 in the Chairs' report to IUPAC Bureau approved.

6.1 Subcommittee reports

Presentation and discussion of past activities, membership, plans

6.1. Chemistry for Development (Mei-Hung Chiu) [CCE2008_06.1]

A power point presentation was made by Mei-Hung Chiu on the Flying Chemist Project, FCP and NICE- program

Proposed action:

- Evaluation project
- Scholarship for young scholars

Thanks from PM to Mei-Hung Chui for a successful leadership.

CCE is positive to the suggestion scholarship for young scholars. Some revision on the text is needed. *PM will bring forward the revised proposal to the Bureau.*

6.2. Public Understanding of Chemistry: (Peter Mahaffy, see [CCE2008_08.1])

The subcommittee has completed its task and will be reconstituted to focus on IYC. Leave report 8.1.

7. Report from Projects group (PM) [CCE2008_07]

Thanks to the chair Choon Do and the group for the report and their work!

7.1. Membership,

The group has expanded in Torino. Note, Hale Bayram is no longer a NR, and therefore not a group member.

7.2. Review procedure

A suggestion from the strategy meeting 2008 was restated:

The project group shall also play a role reviewing project on the way and identify project that have stalled. A recommendation to the group: Monitor the projects every 6 months, to identify all project and checking the status. CCE asks for a more proactive approach from the project group. Terminate projects if there is no activity.

7.3. Project Budget

N/A

7.4. Completed projects

7.5. Current Projects (Please note: Each current project leader reports on status of the following projects – if not present at meeting, please submit a written report to the secretary)

- 207-018-1-050 – Toward an Improved Teaching and Learning of Chemistry at the Tertiary Level in the Philippines
- 207-011-1-050 - International Year of Chemistry - Initial strategy planning
- 207-05-2-050 – Research-Based Evaluation of the Young Ambassadors for Chemistry (YAC) Programme
- 206-043-3-050 - The Social Responsibility of Chemists: Responsible Stewardship
- 202-021-2-050 - A feasibility study of the scope and limitation of machine translations as a means of disseminating useful reading material for chemical education on the internet

Joint projects with other divisions/standing committees

207-038-3 – Development of an isotopic periodic table for the educational community (with Div II)

207-032-1-10 – Green Book – Abridged Version, Joint with Div I

Jim Mc Quillan did send a mail prior to, asking to appoint a CCE member.

Two volunteers: John Bradley and Colin Osborn

PM will pass the names on to Jim Mc Quillan.

207-050-2-60 – Climate and Global Change: Observed Impacts on Planet Earth, joint with Div VI

207-022-2-020 – Recommendations for Codes of Conduct

206-050-3-10 – Wet Surface Vibrational Spectroscopy Experiments, Joint with Div I

204-037-1-40 – Design of Polymer Education Material for French Speaking Countries, joint with Div. IV

204-045-1-70 – Training of School Children on Pesticides and Health – Toxicology in the Classroom, Joint with Div. VII

7.6. Projects under consideration

[CCE2008_07.6 COCI, CCE2008_07.6 powerpoint]

COCI- a co-sponsoring project.

CCE endorse the COCI-project a co-sponsor in a joint project.

Philippe Boesch is appointed as the CCE contact. *PM will forward his name to David Evans.*

7.7. Future projects

In what new areas should projects be proposed, to support our biennial priority areas?

This item is merged with 9.1.

8. Review of activities

8.1. International year of chemistry (Peter Mahaffy) [CCE2008_08.1, 08.2]

PM gave an update on the status.

There are two steps remaining to obtain approval.

- UNESCO general conference
- UN General Assembly

A plea to all from PM:

Get all countries to support. USA, Canada, UK suffer from fatigue for international years, but their support is needed. Take a personal contact with your national representative.

Alex Pokrovsky asked for 15 minutes about fundraising mechanism later on. AP will write down the process and guidelines for CCE.

A shorter discussion and brainstorming concerning the role of CCE and global activities. Resulting in a consensus: PUC will turn their focus to IYC.

8.2. YAC (Lida Schoen)

YAC program in Mauritius.

PP-presentations from Lida Schoen and an update on the latest YAC events.

Soon 15 YAC events done in different part of the world. If the event is a success or not a success, depends on the important local engagement and local organizers.

Report from Mei-Hung, Taipei December 2007 the third YAC-event in Taiwan
Mei-Hung presents the questionnaires and evaluation using external evaluators.
Mei-Hung, raise the idea of making YAC a permanent activity of CCE, like FCP.

CCE stress the wonderful work from Lida and her team!

8.3. Follow-up on linkage between IUPAC and CHF (Peter Mahaffy, oral report)

ICCE in Taipei, symposium stories on chemical achievements

8.4. Other activities

DIDAC update from A Pokrovsky.

Alexander Pokrovsky disagrees with the text in the minutes on page 5 from the meeting Torino 2007:

“UNESCO made this project and IUPAC was invited to take part. This is an ongoing, self sustained project and the project will continue through a self financing mechanism. Can the DIDAC material be used? All author right belongs to UNESCO for free distribution. Part of the material cannot be used in other contexts.”

Alistair Hay:

A brief report highlighting the past activities.

Chaired an IUPAC committee, produced education material on chemical warfare issues. The material is translated in different languages. The work is finished.

Code of conduct.

A brief review of the ethics teaching in Leeds, on issues like plagiarism, copy right and so forth. They are developing case studies, and looking for this.

How can CCE come along?

AH asks for moral support and endorsement from CCE.

CCE approves to give moral support and endorsement.

Microscale
Alex Pokrovski gave an update

9. Follow-up from the break-out session in Torino [CCE2008_09]

9.1. Future activities

[CCE2008_09.1 Sozbilir,]

CCE is your committee! **Each** member is asked to contribute a 3 - 5 minute oral summary of how you can contribute to CCE priority areas and projects, and how you may become involved in proposing and participating in future activities. These ideas will form the basis for discussion in break-out groups.

How we can contribute to CCE:

Eva:

We have a national project focusing on learning outcomes. We have the ambition to up-scale the project to an international level. Anybody interested, contact me.

Christiane:

Chemistry teacher in relation to euro-bachelor label, also for teacher education? A common structure, common outcome.

I decided to work on the topic "Learning outcomes" and I would be very glad if you could give me some further information about the Swedish project you mention on our meeting.

Alex:

Continue to inform you.

UNESCO key partner, pessimistic about financial issues IYC

Mustafa:

can make contributions in the context on IYC. These are may be:

a) develop a project about history of chemistry/chemistry education in Turkey. In this context, I project can be outlined to develop a website or handbook to introduce the history of chemistry/chemistry education in each country.

b) In the context of Teaching & Learning Chemistry, I can outline a research proposal to show what is the status of research in chemistry education in Turkey. This research could also be expanded into an international wide.

Tony:

I am interested in ethics works, code of conduct

Revise the role chemistry education; we have a task of top down.

Third publication: guide to educational policy, at different levels; policy aim.

John

Micro scale: We devoted a lot of effort to establish a base. Collaborated extensive with unesco. Move on, not introduction, more implementation and integrating in curriculum. Want a project 4-5 years in Africa, want CED to be interested.

Erica:

1. To participate in activities/proposals of the Subcommittee: Chemistry for Development as representative of developing countries in Southern Africa. To ensure that activities and programmes of CCE are suitable for implementation in the region I represent.
2. To act as link between CCE and the Southern African region for planning and implementing the International Year of Chemistry.
3. To help with Young Ambassadors for Chemistry if and where needed.

Lida:

YAC is still going, make it sustainable. Want to talk to a few people how to spend the money. Make YAC as FCP.

Mei-Hung:

Project that are sustainable. Move YAC into CED

Top down design in the CED committee.

Evaluations of FCP on the agenda next year.

Project, platforms to share material, call for friends to cooperate. 2 year project would like to expand to other countries. Assessment, standards, representation.

Masahiro:

My present interest is our NICE (Network for Inter-Asian Chemistry Educators) symposium that will be held in Japan on July 29, 30, 2009.

The first NICE was held in Korea in 2006, and the second NICE was held in Taiwan in 2007.

This time, the NICE symposium is held as a pre-event of Chemistry Olympiad mentioned above, and therefore, we are planning to invite as many school teachers as possible.

As for future projects, I would like to help prof. Mei-Hung Chiu's project from viewpoint of developing new materials because my specialty is developing teaching materials and teaching tools not only in the field of chemistry education but also in biology and physics education for primary, secondary and university students.

Colin:

Electronic ways to enhance teaching and learning of chemistry in schools and colleges including dealing with misconceptions.

The notion of practical work, what it is, why it is done, and information on the various types of experiments. Help for those who teach chemistry but are not chemists.

Phillippe:

History of chemistry

Historical documents, Lavoisier principle in several languages

Joint project, periodical tables

Liberato:

Comment about this morning. Impressed by the work done. Interesting to get the students work.

Tony W.

3 projects.

First:

Pre service teacher, misconceptions.

Take the concepts and write comments, labour intensive

Suggesting: Assignments go and look a concept and the research, then write a comment.

Put in on Wikipedia, a good way of honouring students work. Making in a global manner, IUPAC be part of the publicity.

Second:

Worried by the gap of chemistry and bio and life sciences, make more use of understanding the living system.

Third:

Education primary school, area which we get a lot benefit for PUC

Famhy:

I am ready to participate in the project(learning outcomes from SATLC,and other Approaches).You can go to ; www.satlcentral.com (<http://www.satlcentral.com>) to get an idea about SATLC,and its learning outcomes.

Alistair:

Nothing to add

Mort:

My involvement with CCE will be as follows:

1. Serve as the ICCE Conference Coordinator, which will involve dates and sites, development of project and sponsorship support;
2. Serve as liaison from the ACS Division of Chemical Education to IUPAC;
3. Serve as liaison from the ACS Society Committee on Education to IUPAC.

Peter:

- Work on designation and implementation of IYC 2011
- Existing project Isotopic periodical table,
- Continue to work on ethics
- Propose new project on visualizing the chemistry of climate change

Everybody will Email their comments to Eva asap otherwise they have to put up with the secretary's interpretation of what has been said.

10. Interaction with Divisions and Standing Committees

10.1. Oral report from Chair and Divisional Liaison Officer (Eva Åkesson)
Written reports from the AM

10.2. Contributions from Divisional Representatives

Richard Hartshorn

Three items:

1. Revision of principles nomenclature, former bestseller.
2. Have question concerning the style and content, Need outside reviewer from CCE.

11. ICCE programme

11.1. 20th ICCE Mauritius (Ponnadurai Ramasami)

Highlights and statistics presented.

Thanks for all help from Ponnadurai Ramasami to everybody! Thanks for the opportunity to host the conference.

178 abstracts oral presentations, 58 poster
Number participants: at least 190
Virtual conference success with no registration fee.
Proceedings: Requested full papers, 38 full papers will be accepted, 3 reviewers.

PM.

This is a new benchmark, we all know the job you and your team have to put in.
Congratulations to you and your colleagues!

11.1.1. Satellite meeting in Kenya (Peter Mahaffy) [CCE2008_11.1.1]
Very little to report, things are underway.

11.2. ICCE 2010 (Mei-Hung Chiu)

PP presentation by Mei- Hung Chiu
10 minute presentation on Tuesday at the conference.
Noon Tuesday, meeting for international committee, want a discussion about the proceedings.

MH: Where is the venue?

Answer: Three options, not decided.

11.3. ICCE 2012 (Mort Hoffman)

Presentation of letters of intent to host ICCE 2012

MH:

Referring to the extensive discussion in Torino previous CCE meeting.

It may be possible to apply to IUPAC for some funding

It means a self contained and self sustained conference.

No decision will be taken today; the decision will be made in Glasgow next year.

The proposals ought to be a part of the agenda material for the meeting in Glasgow.

- Philippe: Bid from Geneva, Switzerland.
- Liberato: Italy 2012
- Lipkowski: Poland. Warsaw a possible congress city, a presentation of Lipkowski.

Material must be available one month before the Glasgow meeting.

Maybe a small review committee will be needed..

11.4. Future ICCE venues (Mort Hoffman)

Report from MH

Other Educational Conferences

Conference coordinator (Mort Hoffman) to report

12. IUPAC Congress and GA, Glasgow (Peter Mahaffy, oral report)

Leiv Sydnes, chair of Chemrawn, full day session on ethics, want to work with CCE and COCI, will get our support and we will work with him on that.

13. Administrative matters

A Finance (Peter Mahaffy)

Project budget – we need to make sure new, high quality projects continue to come forward
Operation budget - on track, meeting expenses are high for this year's meeting, given the location

B. Membership

Review of process to renew CCE Membership, including nominating committee
Need to think of the next biannual and Take very seriously to bring in new ideas.

TM, AM, NR

Nomination from NAOs

Chair CCE to president of IUPAC

Last time; a membership advisory committee.

PM: Would like to initiate a similar committee and process as previous time.

14. Break out session

Think about the outcome on Wednesday. Project proposal

IYC sub committee- Mustafa

Ethics – Alistair

Learning outcomes – Eva and Christiane

Policy – Tony

YAC –Lida

Review the literature

15. Any other business

N/A

16. Next meeting

Next meeting CCE will take place in the course of the 45th General Assembly, August 2009 in Glasgow.

Eva Åkesson, Secretary

Peter Mahaffy, Chair