

MINUTES of the Division I Meeting

Paris, 07-08 July 2019

(1) Introductory remarks and welcome

Present: Ronald Weir (President of Division I, Canada), Roberto Marquardt (titular member of Division I, France), Vudhichai Parasuk (delegate from Thailand), Attila Császár (Secretary of Division I, Hungary), Pierangelo Metrangolo (titular member of Division I, Italy), Joaquim Luis Bernades (national representative from Portugal), Vladislav Tomišić (associate member of Division I, Croatia), Richard M. Hartshorn (Secretary General of IUPAC, New Zealand), Zhou Qifeng (president of IUPAC, China), Christopher M.A. Brett (vice president of IUPAC, Portugal), Timothy J. Wallington (vice president of Division I, USA), Frances Separovic (titular member of Division I, Australia), Modou Fall (associate member of Division I, Senegal), Theo Kurtén (associate member of Division I, Finland), Hiroko Tokoro (titular member of Division I, Japan), Lynda Chioma Ngozi-Olehi (delegate from Nigeria)

(2) Finalization and approval of agenda

Approved unanimously.

(3) Opening words from Richard Hartshorn

Thanked all the volunteers of IUPAC. Overview of IUPAC activities.

(4) IUPAC's mission

Ron Weir (RW): (a) How to cut costs? (b) GoTo meetings work well. (c) How to minimize pushbacks. (d) OPCW. (e) Clarify what happens with CHEMRAWN (OPCW is part of it), outline role of Executive Committee, Bureau and Council.

(5) Visit of Secretary General, Richard Hartshorn

Richard Hartshorn (RH): Answered questions. OPCW is not solely associated with CHEMRAWN. Green Chemistry for sustainable development is strongly connected with OPCW; not enough interaction between OPCW and CHEMRAWN; CHEMRAWN has not been active enough.

Chris Brett (CB): CHEMRAWN was founded in 1973. Few know the mission of CHEMRAWN. CHEMRAWN organized 19 conferences since

1973, the last in 2016 and two did not come to fruition. Deliverables are sometimes not clear though the topics are very important. CHEMRAWN has simply not been efficient enough. OPCW works with government organizations, IUPAC is very different in this sense.

RW: Division I can provide substantial support for and cooperation with OPCW. There are potential projects which Green Chemistry is not able to handle.

Pier Metrangolo (PM): contact with OPCW should not be simply with Green Chemistry. About a month ago, organized an OPCW-sponsored conference.

RH: OPCW support is important for IUPAC.

RW: There is a brilliant paper from Australia how IUPAC and international unions benefit Australia.

Roberto Marquardt (RM): IUPAC should not be political. IUPAC should provide technical advice and this should be its main duty. No bias, no favouritism of any country. In order to attract NAOs to work with IUPAC, we need to give objective reports. We must stick to our competence.

CB: Multidivisional projects should be set up in order to construct a project supporting OPCW. CB will raise this issue with other divisions; will try to identify different divisions and persons within these divisions to start the process. An OPCW project should be started and he is happy to initiate it but need people from divisions.

Tim Wallington (TW): Fully supports the discussion. This is a huge opportunity for IUPAC. Many individuals are interested in the mole and kg but many people may be more interested in OPCW. IUPAC faces financial challenges; asked whether Chris would provide a 5-minute summary of the finances?

RH: Which are the most important divisions with respect to OPCW support?

RW: The Organic division is most important. Divisions I, II and III should be the most important to involve in the OPCW projects.

RH: Someone from Division I should approach the divisions mentioned.

PM: In fact, all other divisions should be approached except perhaps Division VIII but even they should be approached.

RH: Will look for opportunities to meet and find a suitable time and place to get the interested parties together.

Tim Wallington (TW): Could we learn details about the financial situation of IUPAC?

RH: There are three main income streams. Income from NAOs is basically the same over the years although Brazil withdrew recently (a 36,000 USD loss). More significant change in the income is related to IUPAC's

publications. Ten years ago IUPAC generated much income from PAC but this is no longer the case. The decline was slowed down by the publisher, de Gruyter. IUPAC has a reasonable size reserve but there is reduced income from this due to current low interest rates. IUPAC changed its investment strategy but still not enough so that outside income is needed. There is a deficit in the budget for the 2018-19 biennium and also for the 2020-21 biennium. IUPAC also had to invest in IUPAC100 for the anniversary year. The annual budget is 1.2-1.3 million USD and IUPAC is in the red by about half a million USD. Thus, it is likely that reorganization is needed as the situation is unsustainable to secure the long-term future of IUPAC. This will be discussed on Tuesday at the meeting of the Bureau. Operating costs for the Secretariat are about half a million. The Secretariat is composed of five people, a number that is judged to be insufficient for the workload.

RM: Please send around a financial report to circulate among Division members. Ron Weir can circulate this from April 2019; also can be done for those associated with the Division.

(6) Minutes of Division I meeting (Sao Paulo July 2017)

Approved at the off-year meeting in Milano.

(7) Business arising during the Sao Paulo GA.

Items arising are included within current business.

(8) Approval of the Minutes of the off-year meeting, Milano, Italy (May-June 2018)

Approved.

(9) Business arising since the Milano meeting.

Items arising are included within current business.

Coffee break: 10:00 – 10:20

(10) Division I updates – TM/leadership changes

RM: Two IUPAC representatives (RM and Frances Separovic, FS) and three external experts (from South Africa, South America, and USA) also served on the Nominating Committee. The pool of nominated candidates was assembled from NAOs. Ensured were geographical representation, subject representation (groups of experts), and a balanced gender representation. Several issues, *e.g.*, some NAOs did not nominate certain volunteers who currently serve on Division I, for example, Vladislav Tomišić (VT). However, Theo Kurtén (TK)

was nominated as a NR and he will become an AM. Giuseppe was not nominated as a NR from Italy.

PM: Inquires about the mechanism of the decisions. Transparency needs to be maintained.

RM: The rules and transparency issues should be brought up with the IUPAC officers. Some changes have been made.

(11) Election results

The results of the election process (new *officers* for the next biennium 2020-21) are as follows:

President: Timothy Wallington (male, kinetics, USA)

Vice President: Pierangelo Metrangolo (male, crystallography, Italy)

Secretary: Attila Császár (male, spectroscopy (theory)/quantum chemistry, Hungary)

Past president: Ron Weir (male, chemical thermodynamics, Canada)

Chair of Subcommittee on Symbols, Terminology and Units: Jeremy Frey (male, United Kingdom, laser spectroscopy (experiment)/e-science)

Titular members:

Frances Separovic (female, biophysical chemistry, Australia)

Zhigang Shuai (male, quantum chemistry, China)

Hiroko Tokoro (female, materials chemistry, magnetic properties, phase transitions in solids, Japan)

Ilja Karina Voets (female, materials, membranes, Netherlands)

Angela Wilson (female, theoretical chemistry, USA)

Associate Members:

Joaquim Faria (male, photocatalysis, Portugal)

Vessela Tsakova (female, electrochemistry/polymers, Bulgaria)

Modou Fall (male, electrochemistry/polymers, Senegal)

Seung-Joon Jeon (male, spectroscopy, South Korea)

Theo Kurtén (male, computational chemistry, Finland)

Luis Montero Cabrera (male, affiliated member, quantum chemistry, Cuba)

National representatives

Ilya Vorotyntsev (male, analytical chemistry, Russian Federation)

Gordana Ciric-Marjanovic (female, material chemistry, Serbia)

Lynda Ngozi-Olehi (female, biophysical/green chemistry, Nigeria)

Renata Orikanova (female, biophysical and electrochemistry, Slovakia)

Majdi Hochlaf (male, quantum chemistry, France)
Mohamed Deyab (male, electrochemistry/corrosion, Egypt)

12. Advisory Subcommittee

RM: advising the Division. 45 people were on the list as of January 2018.

RW has revised the list which is now composed of 13 members, as follows:

Professor Chris Brett	Portugal
Professor Lucy Carpenter	UK
Dr Michael Frenkel	USA
Professor Supa Hannongbua	Thailand
Professor Kalina Hristova	USA
Professor Henrik Kjaergaard	Denmark
Professor Katharina Kohse-Hoeinghaus	Germany
Professor Roberto Marquardt	France
Dr Gerry Moss	UK
Professor Michel J. Rossi	Switzerland
Professor Juergen Troe	Germany
Professor Bonnie Wallace	UK
Professor Ron Weir	Canada

Comission I.1

Subcommittee Materials: joint with Division II (Inorganic) and IV (Polymer)

Advisory SubCommittee: see entry within paragraph 12 above. These members will be invited to participate in the next GoTo Meeting. If the number of meeting participants is too large, two GoTo meetings will be arranged.

13. Gold Book revision, Phase II

RM: Provided a summary of what the Gold Book entails. IUPAC is used more and more during legal procedures.

RW: Current Gold Book edition is dated 2008. Aubrey Jenkins has retired and unable to deal with it any longer. Through CPCDS and Division I, as well as other divisions, the Gold Book has been digitized as Phase I (by Stuart J. Chalk, SJC). Phase II: task is to assemble all the updates. There are about 6000 terms of which ~1200 terms concern Division I. Problems arise with duplicate conflicting entries which need to be resolved.

RM: In 2007 a web-based book was proposed. Contained many errors, which is especially bad for the reputation of the Union. This version was removed last

week. SJC finished Phase I during the last two years. Slides from ICTNS meeting of yesterday were shown. Various items need to be reviewed.

TW: What is more appropriate, a committee- or a project-based approach?

RM: Preferably not a project. Everything is online, communication is feasible via email; can do GoTo meetings from time to time.

RW: Decide on three people to take part in this project and coordinate it. Officers have enough to do. Discussion followed regarding who would like to participate.

Lunch: 12:30 – 13:30

Decisions made: Joaquim Luis Bernades (JLB), PM and RM will form the 3-member committee overseeing Phase II tasks. RM will chair the committee. Each member will assign tasks to Division I associates. Two people will do the same terms (letters).

RM: As a test run, all those present should choose 5 terms to see what is needed to update the present Gold Book entry.

14. Division communications – assessment of GoTo meetings

TW: works well.

FS: We need a little practice and there are some technical issues.

RW: Try just to use the telephone, though no mute button.

Modou Fall (MF): Problems with connection, perhaps due to system at his university.

RM: Reach out to national representatives, good attendance from people who otherwise would not come, continue with GoTo meetings.

TW: In reality there is no choice, off-year meetings are too expensive.

JLB: Choice of meeting date is important.

RW: The next GoTo meeting will be in late October.

15. State of the IUPAC union – Division I response

RW: A decision has been made: no more IUPAC funds for face to face off-year meetings. Discussion followed regarding the relative amounts allocated to projects and to Division Operations. The lack of detailed knowledge by Division members made it difficult to offer realistic suggestions for the Bureau. It was made clear that IUPAC must seek additional sources of outside revenue. Continued cutting without more revenue will hasten the death of IUPAC.

RM: There is a clear danger in oversimplifying the structure of IUPAC just for budgetary reasons. All specialities should be reflected. Fewer recommendations are preferred. Databases (especially interdisciplinary) are important. Division budget: 50-60k USD. One-third was spent on the off-year meeting, certainly less than for the GA meeting. Cut 20% from Division budget.

RW: No rules how to spend the remaining 80%.

14:00: Colin Humphries (treasurer of IUPAC, CH) arrived and joined the meeting.

CH: There are substantial direct costs associated with travelling. Furthermore, the Secretariat is overwhelmed by administering all the travel and all the IUPAC-related work (there are over 1000 volunteers). Secretariat uses 50% of the total budget. Take a look how IUPAC works. IUPAC rarely shuts down any division or committee. Must ask what are the basic competencies of IUPAC? Are there more effective ways to organize core activities? Simplification is necessary to simplify and reduce the work of the Secretariat.

Most divisions cost about \$20-30k for projects and \$10-15k for operating budgets.

Deficit forecast is half a million USD per annum, total of \$4M is in reserve. In two-three bienniums at this rate, there would be no money left for IUPAC to operate as one year operating needs to remain in reserve. Largest single cost: travel. In the short term, we must encourage divisions to use other means to fund meetings. Cutting off-year meetings reduces the deficit by half.

Thinking about income: 3 years ago \$920,000 and will go to 820,000 in the next couple of years. Brazil (\$30,000) left IUPAC. What happens if USA, China (\$140,000), UNESCO would not support IUPAC? PAC: \$200,000 income.

Several attendees offered discussion of IUPAC core values.

CH: industry takes freely what IUPAC provides.

Two young observers joined: Dr Claudia Contini (Imperial College, UK) & Matteo Lusi (Ireland). Several attendees, including the young observers, offered discussion regarding IUPAC core values

Break: 15:15 – 15:30

16. Division I budget remainder of current biennium

RW: RW has kept project money in reserve to fund the Green Book 5th edition and the remaining tasks. OPCW initiative is important, needs Task Group chairs; about 82% of the project budget is still unspent.

17. WCLM at GA status

FS: involved in this initiative for the GA, the symposium will take place Wednesday morning; the 17 sustainability goals are to be discussed. Large chemical companies are represented and each leader will have about 10 minutes to speak.

18. Project list for Division I

TW: The current project list was circulated around 30 April 2019. TW led the discussion of the projects.

2006-050-3-100: Jim McQuillan. The Technical Report was submitted and is under review. The related IUPAC webpage is incorrect in that the project has not been discontinued. Decision: Now the project is discontinued, Ron to send a message about this to Fabienne.

2011-037-2-100: Ala Bazyleva. This project was terminated in 2016. At that time 11,000 USD was the remaining budget; 6300 USD were spent on the project. Information did not reach the Secretariat. RW needs to contact the Secretariat.

2012-044-1-100: Pier did not submit an interim report; significant progress was made with completion 31 December 2019. A draft of the report exists, will come out as a recommendation.

2014-010-1-100: Andreas Froba. Current status: in progress. RW to ask the Secretariat.

2014-021-1-100: Jürgen Stohner. The abridged version of the Green Book is on the way to be published. No change in date.

2014-028-2-100: Tamás Turányi. Expected completion is at the end of this year. Get back to TW if this time proves to be insufficient.

2015-002-2-100: Jorg Karger. New final date to complete the project: 31 December 2020.

2016-031-2-100: McDowell. Keep it on the list.

2017-016-3-100: Berts Wilthan. No action needed. Angela Wilson to ask for an interim report.

2017-021-2-100: Stefano Iotti. RW reports that there has been a change in some of the TG members. The project is on track.

2017-024-1-100: Tim Wallington. The project is on track. There was one meeting a couple of months ago, will have another meeting in Paris at the end of this year.

2019-013-1-100: Ala Bazyleva. Too new, no need to discuss this project.

Sunday, Division I meeting started at 10:30 am, following joint meeting with Division II

RW, Attila Császár (AC), RM, JLB, PM: Summarized the outcome of the joint meeting with Division II.

JLB: There is a clear danger in reorganizing the divisions.

RW: Even if there is a short-term solution, to survive, one must solve long-term problems. Bureau must seek long-term goals, must solve problems in 6 years, Executive Committee should formulate long-term changes

RM: It is not fully clear how to deal with the GB entries, what needs to be changed. RM asked those helping with the update not to send WORD documents, plain text is preferred in clear sentences about what is wrong and should be changed. E-mails should be sent to JLB. The division is not allowed to make changes. If the change is major, then a project needs to be started. JLB will send a template to all those associated with Division I.

RM is stepping down from Division I, so he has to be replaced as a representative to ICTNS. The chosen person must make sure that relevant publications (Technical Reports and Recommendations) go through the Division. Decision: RW will be the representative of Division I to ICTNS for the next biennium.

Lunch break: 12:15 – 12:45

RW: Short- and long-term fixes must be forwarded to the Bureau. Guidelines: (1) Cannot solve the problem by cutting alone. (2) Have to raise funds by some

means. These means could be: congresses, meetings, journals, charitable status and textbooks.

AW: The more specific ideas presented, the better for IUPAC. We have only six years left.

TW: Two “decision points” are left (two Council meetings: Montreal 2021 and The Hague 2023). Long term: rationalization of structure.

FS: Biophysical Society cut council to 1/3 and now functions better.

AW: We are living in a hard time for many international organizations. Some projects may not need funding but need IUPAC approval.

RW: Division I has too few projects.

RM: The Green Book’s 4th edition is ready. Publication will happen this year.

RM: One possibility is to keep the structure of IUPAC intact but improve the financial situation by cutting the number of TMs, change funding support structure, *etc.* New financial means must be found to value the important work of the volunteers.

RW: There are people who do not understand the seriousness of the situation. We do not want to alienate supporters of IUPAC.

FS: How about setting up a committee to review IUPAC structure?

Participants: Discussion of files sent by JF.

Meeting adjourned at 14:00.