

CHEMRAWN

Chemistry Research Applied to World Needs

ChemRAWN Committee - Virtual meeting

January 20, 2017, various local times

Attending: Carlos Tollinche (chair), Gary vanLoon (secretary), Oleg Demchuk, Janos Fischer, Suri Iyer, Nadia Kandile, Venceslav Kaucic, Fran Kerton, Zafra Lerman, Brindaban Ranu, Lynn Soby, Leiv Sydnes, Hidehiko Yashima

Tollinche opened the meeting with greetings and thanks to all for joining this our first teleconference. If all goes well, we plan to use this technology for future full or small group meetings. He thanked Lynn Soby, who was participating as a representative of the IUPAC officers. She pointed out that one goal of her presence was to gain an understanding of our planning and how this would fit in with the new strategic plan and support the goals, outcomes and deliverables of IUPAC. Information is also required as an input for budgeting. Soby also explained some of the technical features of the audio conference.

The agenda was approved, with the Chair emphasizing that, after discussion of ChemRAWN plans, time will be set aside for discussion of the goals of ChemRAWN. He also solicited other information on the strategic plan to be submitted later by writing.

The minutes of the June 30/July 1 meeting have been circulated, amended and approved informally.

Updates on proposed meetings

- Medical Diagnostics - Iyer

Iyer spoke about Point of Care Diagnostics as an important and rapidly-developing field. Interest is in innovation to provide high-quality diagnostics, but emphasis for ChemRAWN should also include affordability. For a meeting, Iyer has been contacting possible participants from North America, Europe and has identified a number of persons who are interested. He would like to be made aware of additional contacts, especially from Africa, Middle East and Eastern Europe. For funding support, he said that he is considering NIH and NSF who do give funds for international conferences. He is looking for assistance in further planning, including timing, how to access funds etc.

Tollinche asked about conference location – can it be outside of US if funding is from NIH and NSF? Iyer answered that preference may be for location in the US but this is not essential. Tollinche recommended that Iyer use the ChemRAWN planning

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documents to put the initial plans in place and this should be done soon. The previous material provided by Durst should be helpful in doing this. Tollinche had advice about a Geneva organization (The Foundation for Innovative New Diagnostics) that may be of some assistance. Lokteva asked about the timing. Iyer said 2019 was a reasonable goal. Lokteva indicated that she can suggest potential participants in Russia who might wish to take part. Sydnes said that this is a good topic, and asked whether a committee was already established. He said that this is essential and that the committee should be broad-based, with members from WHO and other organizations beyond ChemRAWN. He also pointed out that there is need for a draft program before we focus on dates. Iyer agreed about the need to form a committee. Sydnes also underlined the ongoing problem in that there is no availability of seed money from IUPAC. Tollinche noted that it would be good to bring in companies (or industry associations) that are involved in developing and providing such diagnostics. vanLoon noted that the conference should focus on widely-known technologies that are now available and could be applied in low-income countries. It would be of benefit to hold the meeting in such countries or, if this is not possible to at least build in Future Actions that take the technologies to a wider arena. Iyer indicated that logistics could be a problem.

Ekaterina Lokteva (to Everyone): 8:42 AM: It is important to have proposal on the scientific content of the conference

Nadia Kandile (to Everyone): 8:43 AM: you can add Sensors as a topic of Iyer conference

Ekaterina Lokteva (to Everyone): 8:43 AM: I support this statement of Gary that low-cost technologies are developed in other countries than USA

Lynn Soby (to Everyone): 8:56 AM: Iyer-Engineers without borders do a lot of work in the low resource areas and in diagnostics. Might be good connection through National Academy of Engineers

- Green catalysis – Ranu

VanLoon explained that Ranu had earlier indicated that he had run into road-blocks that made it not possible to continue planning of this meeting. In particular, the Mumbai colleagues were unable to support the project, meaning among other things that there would be a problem finding a suitable location. Ranu left the issue open to see if this could be carried forward by others in the committee. Sydnes asked about the opinions of other members of the Conference Committee regarding the problem of location for the conference. Ranu replied that no other member of the committee was able to take up the responsibility. Sydnes emphasized the importance of running our conferences through an active committee with collegial decision-making, not as a one-person activity.

Sydnes said we need to build any future plans on whatever work has already been done. Lerman spoke of the Green Chemistry conference to be held in Moscow, and suggested having a ChemRAWN session on Green Catalysis within that conference. vanLoon and Tollinche supported the idea of ChemRAWN doing more of this type of support, ie by playing a part within an existing conferences. Lokteva, indicated that it would still be possible to include this as a new parallel session within the Moscow conference. To do this, it would be necessary for Ranu to forward all his planning material quickly. Ranu said that he would work with Lokteva and send the information

as soon as possible. Ranu and Lokteva are to speak with each other about what can be done. Lerman suggested that Demchuk could be added to the group to further this project; Demchuk agreed to take part. Lerman summarized that there will be consultations between Lokteva, Ranu and Demchuk in order to try to make it possible for ChemRAWN to provide at least a small component of a conference on this important topic.

slavko (to Everyone): 8:49 AM: Ranu, I did not understand what was the difficulties. Slavko

Ekaterina Lokteva (to Everyone): 8:55 AM: In October 2017 there will be green IUPAC conference in Moscow, the 7th event. May be the topic of Ranu's conference can be included as section in the program of the next Green chemistry conference

Ekaterina Lokteva (to Everyone): 8:55 AM: In this case it can be organizes together by CHEMRAWN and Green chemistry committee

Fran Kerton (to Everyone): 8:55 AM: I agree with Ekaterina - that might be a good solution

OLEG DEMCHUK (Private): 8:56 AM: It could be separate conference, especially if we move it in Europe.

Ekaterina Lokteva (to Everyone): 8:58 AM: To detail, non to 2017 conference, but possible next one planned for 2019

Gary vanLoon (to Everyone): 9:03 AM: if we do participate in Moscow, it again should have a ChemRAWN flavour - not just green catalysis in general, but GC that contributes to real world needs.

Nadia Kandile (to Everyone): 9:04 AM: Yes Gary GC is very important in Sustinibilty

OLEG DEMCHUK (Private): 9:06 AM: I would like to help

Ekaterina Lokteva (to Everyone): 9:08 AM: Agree with Zafra

- Research for Capacity Building – Adhikari

Adhikari was not present at the meeting and there was no report.

- E-waste Disposal in Africa - Oghifo and Sydnes

Sydnes has been working on this issue. He reported that a key person is Peter Asava (spelling??) Asava has tried to include additional Kenyans and has recruited, as a possible participant, a professor from Ethiopia. Oghifo wishes to have the meeting in Nigeria but Sydnes stated that it is important to have a program plan underway before discussing the venue. Sydnes plans to write a draft proposal and have it circulated, but indicated that it has been difficult to get responses from potential committee members. He will continue to try to get things moving, but noted that it is important to have people who are from the countries where e-waste problems are acute, in this case from Africa.

Lerman noted that she had met a young chemical engineer in Palestine who has interest in e-waste; she will forward his name to Sydnes. In response to Kaucic, Sydnes indicated that Oghifo remains involved, but continues to promote the meeting being held in Nigeria.

Ekaterina Lokteva (to Everyone): 9:19 AM: Do you know if Jay has any ideas

Ekaterina Lokteva (to Everyone): 9:23 AM: U do not think that Palestina is good place

Zafra Lerman (to Everyone): 9:31 AM: The conference can be in Jordan but we should involve the Palestinians who are building a company to deal with e-waste

Ekaterina Lokteva (to Everyone): 9:31 AM: much better, Jordan

- Herbal Medicine for Health Care – Zaman and Sydnes

Sydney reminded us that there had been a report of this Dhaka meeting in Chemistry International. Future Actions follow-up is underway, but there has been no explicit plan; things are progressing with support especially from Indians and Pakistanis. We are awaiting further information from Zaman. There has been a proposal to establish an international laboratory to do testing of herbal medicines for contaminants. VanLoon asked about status of this lab. Sydney said that there is active planning, but there are controversial issues about location, and it is necessary to have a broadly-based decision about the need and the availability of funding. Tollinche noted the need for accreditation in setting up such a laboratory (WHO could grant them the classification of reference country). Tollinche also noted the wide participation of government, industry and academia in the conference itself and said that this should be carried forward in future actions.

Ekaterina Lokteva (to Everyone): 9:34 AM: China need to be involved, famous for herbal medicine

- Solid Urban Waste – Faraco

Due to problems in timing of the meeting, Faraco could not be present. In her place, Sydney again reminded us that a report of this meeting in Rome has already appeared in Chemistry International. Sydney also noted that during the conference, sensitivity about issues was apparent when some subjects were discussed, indicative of the challenges of achieving international cooperation. We are awaiting a follow-up plan (Future Actions) from Faraco or Malinconico.

- The website - Tollinche and vanLoon

VanLoon reported that there has been good cooperation from IUPAC leading to some improvements and a more attractive and up to date website. Lerman indicated that it would be good to have pictures and other visuals. Soby said that good infographics about topics like e-waste could be useful for posting. She asked for feedback about the IUPAC website. Demchuk said it is much better, but said that it would be good to have better access to ChemRAWN and its activities through standard search engines. He suggested we could add some social media initiatives to ChemRAWN's website and/or activities. One suggestion would be to set up a system where we could solicit questions from the public about chemical issues and have experts respond to these. A third suggestion was to have online conferences and an online blog. The suggestions are appended to the minutes and will be under discussion at Sao Paolo. Soby suggested holding webinars on particular topics and described the various options available. Lerman noted that the ACS produces regular webinars and it could be possible to do something with them, especially in conjunction with their International Activities Office. Tollinche pointed out that the ACS is producing webinars in Spanish for distribution in conjunction with Latin American national organizations (among them Sociedad de Química de Mexico (SQM)) .

Fran Kerton (to Everyone): 9:42 AM: I agree with Zafra re pictures, but it is looking good and it is great to be able to access the reports easily

Fran Kerton (to Everyone): 9:49 AM: These are great ideas from Oleg (re: facebook, linked in etc). There is a facebook group

called chemists without borders that others might be interested in:

<https://www.facebook.com/groups/ChemistsWithoutBorders/>

Ekaterina Lokteva (to Everyone): 9:50 AM: Agree with Oleg and Fran, great idea and should be accomplished fast

Fran Kerton (to Everyone): 9:58 AM: In addition to webinars, it might be a good idea to have a youtube channel with short 3-10 minutes on topics (...these can also have subtitles for different regions)

Ekaterina Lokteva (to Everyone): 9:58 AM: agree about youtube channel

Ekaterina Lokteva (to Everyone): 10:18 AM: One global issue is what chemistry can do to prevent terrorism

- Nominating Committee - Tollinche

Tollinche reported that on February 15, nominating committees will be examining the suggestions for membership of each committee. Members of CR should have information about their individual status in terms of membership of CR.

For General Discussion

Planning for the Sao Paulo meeting, July 2017

Committees are meeting on Sunday and Monday, July 10 and 11. There is a request for the Interdivisional Committee on Green Chemistry to hold a meeting in a time that would enable interaction with other committees.

The World Chemistry Leadership Meeting committee have invited participation at their meeting on July 12. Tollinche and vanLoon will take part, but other members are also welcome to take part.

Lerman asked about the proposed ChemRAWN focus on Entrepreneurship at Sao Paulo, but Tollinche has found that there was little interest from those referred to evaluate the potential for such topic. Lerman also spoke of the World Science Forum (in October) which deals with Sustainability and other issues of global importance and urged that we be part of this. Soby said that IUPAC is not at present involved with this activity. This could be worth ChemRAWN discussing (although the timing is urgent) and would enable IUPAC/ChemRAWN to participate in a more visible platform.

- Discussion about ChemRAWN and its role in IUPAC

Tollinche invited discussion on how ChemRAWN could align itself with the current goals and strategic plan of IUPAC. Tollinche spoke that he is working on a 'value proposition' for ChemRAWN and a communication plan that will accompany the proposition. Input from members is needed to complete this exercise. Some ideas were brought forward by members and others were solicited by subsequent email.

Soby spoke of the potential value of ChemRAWN and asked us to emphasize the unique role of ChemRAWN and its global reach. She asked us to look toward its relevance with respect to 'the next world problems', and how it can communicate its thinking. She also urged us to interact more clearly with other divisions like environment and health. Tollinche underlined the importance of benchmarking and interacting. The questions that we need to consider are the following:

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1. Why do we need ChemRAWN in IUPAC?
2. What is ChemRAWN's unique role in IUPAC and the world community?
3. What does IUPAC do for its members from a perspective of the standing committees and divisions, in particular ChemRAWN for the stakeholders (i.e. NAO's, industry, associate members, others)?
4. How can we communicate this to our CR members, IUPAC and its stakeholders?

Members should forward their opinions to Tollinche and vanLoon as soon as possible.

The meeting was adjourned after a duration of 2.5 hours.

Appendix:

Thoughts from Oleg Demchuk about increasing the visibility of ChemRAWN

It looks that the identity of ChemRAWN somehow is overlapping with the new Green Chemistry Committee. In many points the topics of ChemRAWN conferences are also covered with the topics of green chemistry conferences. Thus it may be reflected also on the available funds.

If we look for ChemRAWN in google there are the IUPAC webpage and pages of the ChemRAWN conferences. Actually it is not clear what is ChemRAWN and why it is important.

That is why I think it is not bad idea to gain the visibility. There are few possibilities to make the ChemRAWN more visible.

First of all the visibility in current period can be achieved with the promotion in public media. Of course, no many people will read the web page or FB of the committee, moreover we probably cannot start such pages without the permission of the bureau, and without the consulting with the IUPAC officers the page content. Thus I would propose next initiative.

- 1) We may use IUPAC webpage to collect the requests for expertise or advises or explanations from the local chemistry communities and citizen scientists. Thus ChemRAWN will help to find the experts.
- 2) There is an option we can collect the real problem from the different parts of the world. That could be published as a blog and constitute the core of discuss platform. The information could be initially disseminated though the universities, LinkedIn groups etc. It could be difficult but we could try to initiate the citizen science platform dealing with the word needs issues. There are few organisation already successfully working in that direction IFTF, Khan Academy, TED... and we can use their ideas.

- 3) Next possibility is organise the open panel discussion during the ChemRAWN conferences. It could be possible to invite the well-recognised person to join the panel so the press could be interested to come.

The solving the World problems opens the opportunity for the entrepreneurs, but this category is usually underrepresented on the chemistry conferences. That is why it could be interesting to organise such focused on small business. For example the “small medical diagnostic devices” is a great topic for the collaboration with Start-ups around the World.