

12th Meeting of the IUPAP Working Group on Accelerator Science (WG14)

March 7, 2023, 14:00 – 16:00 CET

Virtual Meeting

Attendees: Gianluigi Arduini, Swapan Chattopadhyay, Simon Connell, Stuart Henderson, Tadashi Koseki, Mats Lindroos, Lin Liu, Nikolai Lobanov, Michael Moyers, Sekazi Mtingwa, Simon Mullins, Vaishali Naik, Qing Qin, Lenny Rivkin, Thomas Roser, Aliz Simon, Liangting Sun.

Excused: Maher Attal, Bob Bingham, Yunhai Cai, Di-Jing Huang, Oliver Kester, Mike Seidel, Suzie Sheehy, Bridinette Sendja

Agenda and slides available at: <https://indico.cern.ch/event/1257529/>

Topic 1: Agenda, Minutes and Follow-up of actions (see slides: https://indico.cern.ch/event/1257529/contributions/5298275/attachments/2604529/4537971/Meeting_20230307_Agenda%26Follow-up%20of%20actions_last.pptx) - G. Arduini

The draft minutes of the previous meeting are approved.

Follow-up of actions:

1. Publications: WG14 should provide a position statement and a plan of action. Caterina (lead), Di-Jing, Gianluigi, Nikolay, Oliver will address this. **Action: Caterina, Di-Jing, Gianluigi, Nikolay, Oliver. Lin will report on the discussions at the last JACoW stakeholders' meeting at the next WG14 meeting. (see Topic 3)**
2. Communication (Web site, etc.). **Action: WG members to pro-actively contribute to the content of the web page. We are missing support to help with the content and to suggest contributions. Action: all**
3. WG14 could contribute to define an accelerator session at the next PTCOG meeting. Michael to liaise with the WG14 members and PTCOG. A talk on recent developments for accelerators for therapy and radiobiological studies, also mentioning the activity of WG14, is going to be submitted. Bob Bingham will circulate an abstract within the WG in the next days. **After discussion with B. Bingham and M. Moyers, no abstract submitted and propose to write a WG14 report on that instead → Bob Bingham and Michael Moyers to take the lead.**
4. Liangting volunteered to provide an article on activities in Accelerator Science in China for the IUPAP WG14 website. Liangting will send an article by the end of January 2023. **Done → published on our website.**

Topic 2: Promotional aspects of accelerators science and technology: <https://indico.cern.ch/event/1257529/contributions/5298286/attachments/2605781/4500726/IUPAP%20Promotion%20of%20Accelerators%20Suzie%20-%20Swapan.pdf>) – S. Chattopadhyay, S. Sheehy

Swapan and Suzie summarized the ideas on how to use IUPAP-WG14 to promote the status of accelerators and large instruments of science based on particle beams to a wide audience from general public to students and policy makers.

Examples exist (e.g. promotion of quantum science in the USA). Propose to create material for communicating the benefits of accelerators. An intern at Melbourne University could be hired to work on this. **Action: Gianluigi to look for funding for this initiative.** Potential speakers/audiences will have then to be identified and WG14 should lobby to get invitations to speak.

Aliz mentioned that she has hired an intern at IAEA to collect and classify the information available on the web on Accelerator Science. This could provide important input for the preparation of the communication material. **Action: Aliz will circulate the terms of reference of the work to be conducted by the IAEA intern for possible feedback.**

During the discussion it became clear that it is important to adapt our communication to the new communication styles of younger generation: social media should be also used. Gianluigi mentioned that IUPAP has a LinkedIn account where WG14 has been posting. Lin noted that it would be important to make sure that our web page is publicized and we should profit of the forthcoming IPAC23 and International Accelerator School to make it “visible” by adding links to the web pages of these events. **Action: Gianluigi.** Liangting noted that it is not easy to reach out to students and the public in China.

Topic 3: Report form the JACoW Stakeholders meeting (see slides: https://indico.cern.ch/event/1257529/contributions/5304474/attachments/2606265/4501728/jacow_LinLiu.pptx) – L. Liu

Lin reported on the JACoW stakeholders meeting held during IPAC22. JACoW operates on a voluntary basis with manpower provided by various accelerator laboratories. Recently the support for the JACoW repository in the US (located at Fermilab) has been terminated with CERN and KEK continuing to provide the storage for the proceedings of the past JACoW accelerator conferences. At present an editorial team composed by members of the personnel from various institutes and attending the conference (supported by the respective institutes) is responsible for a layout review of each of the submitted papers (~1500) during the conference. It has been often questioned whether a detailed layout review is necessary for the proceedings and whether the editing of the proceedings could be done at least partially remotely knowing that the presence of the editors at the conferences is also used for training the editors of the next conferences. Quite some effort by the Indico team at CERN has been made to integrate the conference management and editing modules in Indico.

IPAC proceedings authors can submit papers to a peer-reviewed section of the proceedings (~100-150). The peer-reviewed section is published by JACoW and by Institute of Physics Journal of Physics: Conference Series, the articles published in the latter are visible in the known publication and citation databases. The cost per published article for IPAC'17 was of the order of ~30 EUR with IoP.

Mats noted that JACoW should be encouraged to become a non-profit publisher offering their services and charging the conferences for the publication of the proceedings. Gianluigi noted that ICHEP (High Energy International conference organized by the IUPAP Commission on Particles and Fields) publishes

the conference proceedings under the SISSA Proceedings of Science (PoS), though these papers are not visible in the publication and citation databases (as for the JACoW papers). The cost of the publication of the proceedings under PoS is 5 to 10 EUR/paper depending on the level of support required. Simon Connell confirmed that Indico has a module for the edition of the proceedings and for peer-review. The proceedings of SAIP 2022 (annual conference of the South-African Institute of Physics) have been published using this module. The reviewers took care of the verification of the layout and content. The proceedings are available here: <https://events.saip.org.za/event/225/page/546-the-proceedings-of-saip2022> (~700 pages and 106 published articles). The editorial team worked off-line. The Proceedings have an ISBN number.

Topic 4: Discussion on possible new representatives and next steps

Caterina Biscari, Di-Jing Huang, Lia Merminga and Minh Quang Tran have asked to step down from WG14. We should look for possible candidates to take over. The candidates should be committed to dedicate some time to contribute to the activities of the Working Group. Di-Jing has proposed Gwo-Huei Luo (NSRRC, Taiwan) to replace him. Gianluigi also noted that Christine Darve (ESS) could be a good candidate.

Gianluigi asked the WG members to propose candidates to replace the four leaving members taking into account as far as possible expertise, gender and regional diversity. **Action: all working group members to send a list of proposed candidates (name, affiliation, few lines of introduction) to Gianluigi by Friday 21st April 2023.**

Topic 5: Future Meetings

Next meetings are tentatively scheduled on:

- 11th May 2023 at 16:30 at IPAC'23 (remote connection also available)
- September (week starting 18/09). Tentatively 21:00 GVA time

Notes written by Gianluigi Arduini (05/04/2023)

List of pending actions:

1. Communication (Web site, etc.). **We are missing support to help with the content and to suggest contributions. Action: all**
2. A report on recent developments for accelerators for therapy and radiobiological studies will be produced. **Bob Bingham and Michael Moyers to take the lead.**

3. An intern at Melbourne University could be hired to create material for communicating the benefits of accelerators. **Action: Gianluigi to look for funding for this initiative.**
4. Aliz mentioned that she has hired an intern at IAEA to collect and classify the information available on the web on Accelerator Science. This could provide important input for the preparation of the communication material. **Action: Aliz will circulate the terms of reference of the work to be conducted by the IAEA intern for possible feedback.**
5. Lin noted that it would be important to make sure that our web page is publicized and we should profit of the forthcoming IPAC23 and International Accelerator School to make it “visible” by adding links to the web pages of these events. **Action: Gianluigi.**
6. Gianluigi asked the WG members to propose candidates to replace the four members leaving taking into account as far as possible expertise, gender and regional diversity. **Action: all working group members to send a list of proposed candidates (name, affiliation, few lines of introduction) to Gianluigi by Friday 21st April 2023.**