IUPAP Commission on Semiconductor Physics (C8) Report on Activities in 2020/2021 for the October, 2021 C&CC Meeting

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The last report about the activities of C8 was submitted for the meeting in October 2020. Due to the COVID-19 pandemic the term of the commission members did not end in December 2020. It has been extended until December 2021 and all members agreed to this.

There were email exchanges among the members during the year. **Covid-19** affected all matters of the commission quite heavily. Therefore, in 2021 there were no meetings of the commission in person, but on Friday July 30th 2021 a Skype meeting was held where many of the members participated. Although there were some small technical problems the discussion went most of the time quite smoothly.

The agenda of the meeting on Friday 30th July 2021:

- 1. introduction
- 2. discussion of possible members of next C8 commission
- 3. IUPAP matters and plans for the General Assembly in October
- 4. planned conferences
- 5. next YSP prizes
- 6. miscellaneous

Under **point 1** of the agenda the new website of the commission was introduced. Young Dong Kim was thanked for organizing several nice images showing different aspects of semiconductor physics.

Under **point 2** the possible members of the next C8 commission were discussed. They will be elected during the next General Meeting of IUPAP taking place from October 20th to October 22nd in 2021.

Under **point 3** of the agenda IUPAP matters, i.e. the structure of IUPAP, General Assembly, statements of IUPAP in 2020, and executive council were introduced. Concerning the office of IUPAP the end of the contract with Singapore and the search for a new location were mentioned together with some possible future modifications of the statues and of the formal legal status of the IUPAP.

Under **point 4** planned conferences were discussed. In 2022 two applications for IUPAP sponsorship were applied for. The postponed 35th ICPS was again judged as a category A conference. Whereas for ICPS the connection to semiconductor physics is obvious, for another conference seeking sponsorship from IUPAP this connection to semiconductor physics was not clear, so it could not be approved by the commission.

The **35**th **ICPS** was postponed from 2020 to 2022 due to Covid-19. It is now planned to take place in the International Conference Centre in Sydney, Australia, **from 26**th **June to 1**st **July 2022**. Sven Rogge as conference chairman provided several slides about the status of preparations for the conference. The preparations are on the right path, but due to the unforeseeable legal regulations concerning Covid-19 in Sydney at the time of the conference it is unclear whether the conference will take place in full presence, as a hybrid conference or only as an online conference. The commission sees these problems and hopes that at the time of the conference no restrictions will exist and that all semiconductor physicists will be able to meet in person in Sydney.

The **36th ICPS** is planned to take place from **28th July to 2nd August 2024 in Ottawa, Canada**. Pawel Hawrylak as the future chairman provided some slides about the conference venue, which will be the Ottawa Shaw Conference Centre. He also showed on the slides the present status of the organization and the planned members of the committees. Possible accommodations, i.e. many downtown hotels will be within walking distance to the conference centre, but also student accommodations on campus will be close by. With some remarks about the planned budget the presentation ended. The commission is very positive about these plans.

For the following **37**th **ICPS** no host country was chosen before the commission meeting. The 37th ICPS should be organized in 2026. Yasuhiko Arakawa proposed **Japan** as the host country for this conference and showed several slides about a possible venue etc. His plans were very well accepted by the commission, suggesting that they will be finally approved during the commission meeting in 2022.

Under **point 5** of the agenda the announcement of the next IUPAP young scientist prizes in semiconductor physics was discussed. One of the main activities of the commission is the selection of the prize winners for the **IUPAP Young Scientist Prizes in Semiconductor Physics**. The commission will again be able to select two prize winners as in previous rounds. The announcement for the prizes in 2022 will be similar to the previous announcements. The text was discussed in detail. The deadline for the nominations will be December 31st 2021.

Postponed prize talks of the two prize winners of 2020, Cheng Gong and Michael Saliba, are planned to be given during the 35th ICPS 2022 together with the prize talks of the future IUPAP Young Scientist Prize winners in Semiconductor Physics 2022.

Point 6 of the agenda was named "miscellaneous". Here it was discussed that it would be nice to have a last meeting before the end of the term of the members of the present commission. The idea came then up that **in December 2021** one should have an online meeting **with all the present members and also the newly elected members** of the future commission.