53rd International Chemistry Olympiad

February 27, 2021

Steering Committee Meeting Minutes

A) Members

Elected:

- I-Jy Chang, Taiwan
- Alexander Gladilin, Russia
- JL Kiappes, USA
- Gábor Magyarfalvi, Hungary, chair
- Petra Ménová, Czech Republic
- Martin Putala, Slovakia

Ex officio:

- Yunus Emre Türkmen, Turkey
- Nobuhiro Kihara, Japan
- Xinxing Zhang, China
- Patrik Willi, Switzerland
- Reem S. Al-Mohammed, Saudi Arabia
- Abdallah Elmarhoune, UAE, absent from the meeting

Co-opted:

• Worawan Bhanthumnavin, Thailand

Present at the meeting:

Representatives of Japan: Yoshiki Chujo, Chair of Executive Committee; Hiroshi Seta, Head Office Manager; Shinya Sasaki, Head Secretary

B) Agenda points

Feb. 27, Session 1 17.00-19.30 (JST)

1. Presentation and discussion of the schedule, events and organization of the IChO

Yoshiki Chujo, the chair of the Executive Committee announced that the Japanese organizers decided to choose a remote format for the IChO in 2021. In the present pandemic, this is the best way to ensure the safety of all participants and provide an even playing field to all students. The organizers will do their best to preserve the international experience of the olympiad. There will be no practical exam in the competition.

The members of the Steering Committee agreed with the decision and expressed their full support. This is the responsible choice in the present global situation.

Prof. Nobuhiro Kihara presented detailed plans to the SC.

Invitations will go out to participating countries in the first week of March. The guidelines for the procedures of the remote IChO will be adapted from the 52^{nd} IChO held in Turkey, 2020 and will be published shortly.

Country registration will open after the International Jury accepts the temporary regulation changes necessary to hold a remote IChO without a practical exam. Mentors are requested to register early and indicate the date of the selection of their team in advance. Registering other participants (students, observers and invigilators) should be done as soon as possible and ideally before the end of May. In view of the difficult situation globally, the organizers will try to be accommodating and flexible.

Early student registration is important because the hosts intend to commission hand-crafted virtual 3D avatars for competing students. These can be used in the online activities and ceremonies. This is a time-consuming and costly process (can take months for 300 students). So all countries are kindly asked to provide the information as soon as possible.

A mock exam will be organized before the start of the olympiad where experienced mentors will take the exam, discuss question details and wording to reduce Jury meeting length. Organizers were reminded to assess the time allowed for the exam and the length of the text in advance, because cutting from the problem set is very difficult after the Jury has access.

The olympiad will start with an online opening ceremony on July 25th. Mentors will receive the proposed problems on the online OlyExam system after the ceremony, and they will have time to submit feedback before the Jury meeting on the 26th.

The theoretical exam is scheduled for July 28th with 24 hours allowed for translation. The exam will have to start within a five-hour window.

All olympiad participants (students, mentors, invigilators) will take a written oath that they will comply with exam rules.

Grading will be done through OlyExam. There will be ample time for arbitration. The procedure will be managed closely so that waiting times are minimized (with a common virtual meeting room, queues for tasks, and conflict resolution procedures during the arbitration itself).

The Steering Committee recommends that after grading by the authors and mentors, marks be shared both ways (mentors see the authors' marks only when they submit their own marks, and authors see the mentors' marks after they submit theirs). Where there is disagreement, arbitration will take place to find a final mark. This procedure is more just/fair and eliminates grading errors. The same practice is used by other science olympiads and is the default method implemented in OlyExam.

However, present regulations specify that authors present their marks first. Countries are invited to contribute their opinion on this change. It is proposed that the International Jury vote to accept this procedure in advance of the olympiad. Further details and opportunity for discussion will be provided (even via videoconference, if required) and the change will only be introduced if more than 2/3 of countries agree.

Student activities beyond the ceremonies and exam will include online cultural activities and visits using virtual reality tools. 3D avatars will be made to the likenesses of the students based on photos (this is optional). This is a time-consuming process, and students should be registered at the earliest possible time. The aim is to give students a special experience and an attractive program. Activities for students will be organized over 6 days (most will be scheduled; some will be on demand). These include a 3D visit to the world's largest synchrotron, Osaka castle in, sword preparation, art restoration and more.

The importance of laboratory work will be emphasized by the publication of the practical tasks prepared for the exam on the homepage with demonstrations by Japanese students. Videos of the experiments being done all over the world will be solicited from the delegations, but this will all happen after the IChO and will not influence the student ranking.

There is one Jury meeting scheduled on the day before the arbitration. This is when future hosts will make their presentation, and proposals for hosting the IChO will be introduced. The results of the election of new Steering Committee members will be announced at this meeting.

If necessary, another Jury meeting could be scheduled after the arbitration procedure.

2. Review of the fees and invitations

The official IChO participation fee is 3000 USD. The organizers proposed to accept a significant reduction: 1000 USD for the participating teams and 500 USD for each observer (1000 USD for guests if any). Bank transfer and conversion costs should be borne by the senders, but accidental small differences will not cause a problem.

84 teams with competitors and 6 observer countries will be invited in the first week of March to IChO 2021.

Feb. 27, Session 2 19.45-21.00 (JST)

3. Discussion of financial support

Countries having difficulties to raise their participation fee can request support. A part of the funding comes from organizations: IUPAC (2500 USD), the Chinese Chemical Society at Taipei (-2021, 2000 USD) and the American Chemical Society (-2021, 2000 USD). A portion of the participation fees can be redirected from other countries' fees.

The allocation of the support is the task of the SC. Every country applying for help will have to submit an online application detailing their reasons and the sum requested by **April 15th**. Any support requests for more than 75% of the fee are will be acceptable only with very strong justification. Decisions about support will be made by the end of April.

Observer countries are not eligible for support. Their payment indicates that they will have adequate support behind them in the future as well.

4. Jury voting schedule and organization (to approve a remote IChO, regulation changes, SC elections)

In order to approve the remote organization of the IChO in 2021, more than $2/3^{rd}$ of IChO member countries have to approve the extraordinary regulations. These will be practically the same rules as in 2020.

A remote vote will start immediately where countries can indicate their stance until March 16^{th} .

During May and June, countries will be asked about the change in the procedure for sharing the author/mentor marks before arbitration.

A vote about the minor regulation changes in circulation since 2018 that was discussed multiple times is planned at the same time.

Election of the SC members will take place remotely in 2021. 4 members of the SC will have their terms expired after this olympiad. 2 of them can be nominated again.

The following procedure is proposed for the elections: Candidates to the Steering Committee can be nominated from May until July 1^{st} . If the nominees accept the nomination, they are asked to prepare self-introduction in writing (no longer than 1 page) and a 2-minute video. These will be shared with all delegations before the olympiad.

Each registered head mentor will be able to name up to 4 persons to the SC in a secret ballot. Votes can be submitted until the business Jury meeting, where results (with vote counts) will be announced. The election process (nominations, introductions) will be coordinated by the elected SC members not up for reelection.

5. Miscellaneous

There were very few contributions to the set of exemplary past IChO problems. Petra Menova will send a reminder to the countries to get more input before compiling the set.