

THE MACEDONIAN TEAM CONTINUES THE SUCCESS AT THE INTERNATIONAL CHEMISTRY OLYMPIAD 2021

Seems like the plans for the 53rd International Chemistry Olympiad – IChO of the Organizing Committee, crumbled down after the several waves of pandemic spread in the world. The Japanese hosts were prepared and ready to welcome the delegations from around the world in Osaka, Japan. They had everything prepared for a normal Olympiad, but in February 2021 the Steering Committee decided that a remote (on-line) Olympiad was the only option since the safety of the participants was the most important. This evoked not having experiments as part of the competition. The practice of this years' Physics Olympiad could not be implemented at the IChO since it is very difficult to transport chemicals and laboratory equipment. Additionally, when working with standard solutions and samples, it is difficult to conduct the experiments remotely in a manner that every student has equal working conditions. Instead, to maintain the true spirit of the Olympiad, the organizer prepared a virtual practical test – detailed video for the alleged experiments (icho2021.org/videos).

In order to retain the experience of the actual live Olympiad, the organizer created a so-called Virtual Room (Fig.1), where every participant can join, have a conversation with other participants, choose a sit in the ceremony hall and watch the event. Also, the planned excursions for the students were recorded and every participant had the opportunity to, at least virtually to see the beauties Japan can offer.

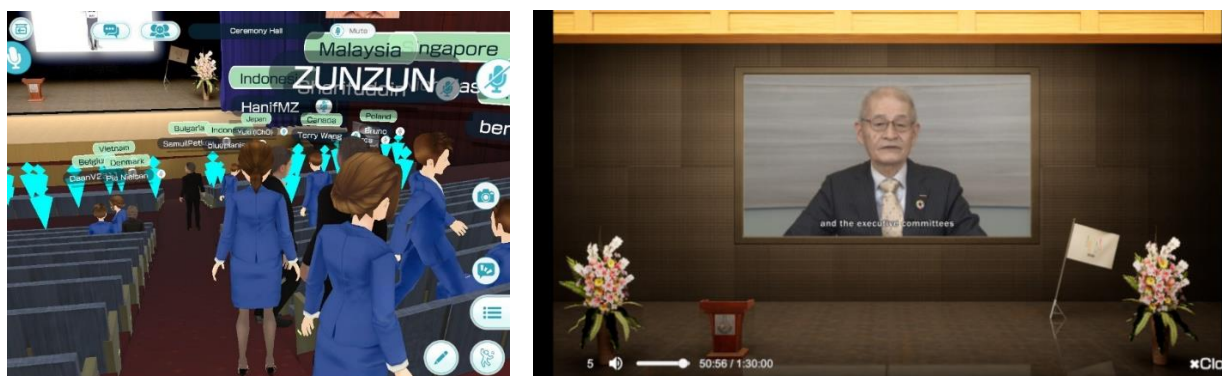


Fig. 1. Opening ceremony of the 53rd IChO in the so-called Virtual Room (VR) and the speech given by the 2019 chemistry Nobel Laureate Akira Yoshino

Despite the difficult situation around the world, 312 students and 158 mentors from 79 countries took part of this years' remote Olympiad. Additionally, 171 invigilators were engaged in the competition in order to retain the fairness. The number of this years' observers was 51 and the official duration of the event was from 25th of July until 2nd of August 2021.

The selected team of 4 students managed to win a bronze medal at this competition. The winner was Darko Stojchev, and the team consisted of (Fig. 2, from left to right):

- Anja Spasovska, student at 3rd year in the Municipal High School "Goce Delchev", Kumanovo;
- Jan Stojanov, student at 1st year in the Private High School "Yahya Kemal", Skopje;
- Darko Stojchev, student at 3rd year in the Skopje City's' High School "Josip Broz Tito", Skopje (**bronze medal winner**).
- Mihail Trajkov, student at 4th year in the Private High School "Yahya Kemal", Skopje;



Fig. 2. The participants after the completion of the competition (28th of July) at the Institute of Chemistry in Skopje. Anja Spasovska, Jan Stojanovski, Darko Stojchev, Mihail Trajkov (from left to right)

Darko Stojchev is a second time participant at IChO competition [1]. Last year he got close to the points for winning bronze medal, but he was awarded an "Honorable Mention". He has been part of the International Junior Science Olympiad in 2018, as well [2]. During the years, since SCTM has taken over the lead for selection and preparation of the students for international Olympiads, the individual ranking and achievements of the best student increased [3–5], but on the other hand, the team performance notes decrease, as shown in Fig. 3. We assume that the reason for this is due to the reduced number of classes for the preparation as well as the remote way of conducting them.

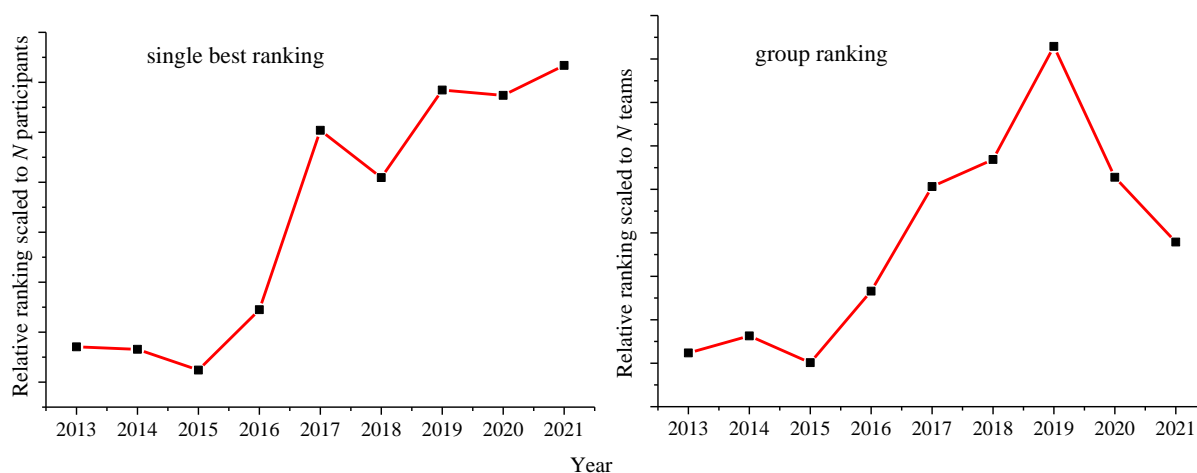


Fig. 3. Best relative ranking over the years of the (a) student with the highest score and (b) entire team, scaled to the number of participants and top single result

CONCLUSION

Despite the obstacles caused by the pandemic, SCTM managed to conduct all the necessary activities in order to select the Macedonian team for participation at the International Olympiads. The achieved result by Darko Stojchev are the best so far in the history of the Macedonian team at IChO, but the team performance is deteriorating. The cause is supposed to be in the lack of conditions to conduct proper preparations, during the two year period 2020–2021. We hope that this trend will not continue in the future.

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Prof. Dr. Miha Bukleski

Institute of Chemistry, Faculty of Natural Sciences and Mathematics,

Skopje

mihabukleski@yahoo.com