

THE ENORMOUS SUCCESS FOR MACEDONIAN TEAM AT THE INTERNATIONAL JUNIOR SCIENCE OLYMPIAD 2019

International Junior Science Olympiad (IJSO) is a competition in science for students who are fifteen years or younger on 31st December of the competition year. IJSO aims to promote interest in science among school students, exposing them to problem solving, critical thinking and experimentation. Over the years, IJSO positively impact science and mathematics at school level.

In 2019, the 16th International Junior Science Olympiad was held in Doha, Qatar, from December 3 to 12, 2019, with the greatest number of participants, or 409 competitors from 70 countries around the world. The event was organized by the Ministry of Education and Higher Education in cooperation with the University of Qatar [1]. The need to introduce students, at a young age, to an international network of science enthusiasts was once again emphasized by Fawzia Abdulaziz Al Khater, assistant undersecretary for educational affairs at the Ministry of Education and Higher Education, who noted that IJSO promotes and rewards the pursuit of excellence in scientific endeavor and stimulates gifted students to further develop their talents in natural sciences.

This is the third participation of the Macedonian team at IJSO (Fig. 1) and in 2019, our team showed outstanding results. This is the biggest success of a team from Macedonia in an international prestigious competition so far. In 2017 we returned with one bronze medal won by Mila Ivanovska [2]. The following year the result was significantly improved as three of our students manage to win bronze medals – Mila Ivanovska, Darko Stojchev and Dimitar Djorlev [3]. At the closing ceremony of the International Junior Science Olympiad in the arena in Doha, Qatar, the Macedonian team was awarded with five medals – two silver and three bronze medals. It was a privilege to have the ambassador of Macedonia in Qatar, Mr. Dragan Jordanovski with us at the closing ceremony.



Fig. 1. Opening ceremony in Doha, Qatar

Given the overall achievements, it is clear that we are making progress in this area. Here, of course, the greatest merit is the hard work and great motivation of the students for success, as well as the investment in quality students' preparation, greater experience and commitment of the team of professors from the three associations: Society of Physicists of Macedonia, Society of Chemists and Technologists of Macedonia and Macedonian Biological Society. The team from the Institute of Chemistry involved in the preparation of the students were: Prof. d-r Marina Stojanovska, Prof. d-r Vladimir Petrushevski and the laboratory assistant Dijana Simich.

The six students who represented our country were selected through a strict selection through competitions in physics, chemistry and biology (municipal, regional and state) and two selection competitions, followed by intensive preparations at the Faculty of Natural Sciences and Mathematics (Fig. 2), using the capacities and resources available to the faculty and, of course, in cooperation with the three associations.



Fig. 2. The preparations at the Institute of Chemistry, Faculty of Natural Sciences and Mathematics

The selected team of 6 students, 3 mentors from the Faculty of Natural Sciences and Mathematics and physics primary school teacher that represented Macedonia at this prestigious Olympiad consisted of (Fig. 3):

1. Majkl Georgievski, student at 9th grade in the primary school "Goce Delchev", Kavadarci,
2. Emilija Nikolovska, student at 8th grade in the primary school "Grigor Prlichev", Ohrid,
3. Nikola Spirovski, student at 8th grade in the primary school "Johann Heinrich Pestalozzi", Skopje,
4. Matej Gelev, student at 8th grade in the primary school "Blazhe Koneski", Veles,
5. Stefan Drmach, student at 9th grade in the primary school "Johann Heinrich Pestalozzi", Skopje,
6. Teona Kirovska, student at 9th grade in the primary school "Goce Delchev", Sveti Nikole,
7. Prof. Dr. Boce Mitrevski, mentor, Institute of Physics, Faculty of Natural Sciences and Mathematics in Skopje, member of the Society of Physicists of Macedonia,
8. Prof. Dr. Marina Stojanovska, mentor, Institute of Chemistry, Faculty of Natural Sciences and Mathematics in Skopje, member of the Society of Chemists and Technologists of Macedonia,
9. M.Sc. Lozenka Ivanova, mentor, Institute of Biology, Faculty of Natural Sciences and Mathematics in Skopje, member of the Macedonian Biological Society, and
10. Cvetanka Ilioska, physics teacher at the primary school "Johann Heinrich Pestalozzi", Skopje.



Fig. 3. The Macedonian team at the IJSO 2019 after the award ceremony. From left to right: physics teacher Cvetanka Ilioska, Teona Kirovska, Majkl Georgievski (silver medal winner), Prof. Dr. Boce Mitrevski, Matej Gelev (bronze medal winner), Emilija Nikolovska (bronze medal winner), Stefan Drmach (bronze medal winner), Prof. Dr. Marina Stojanovska, Nikola Spirovski (silver medal winner), M.Sc. Lozenka Ivanova.

In the end, this huge success that we are all proud of would not have been possible without the generous support of the Fund for Innovation and Technology Development, Agency of Youth and Sport, and several municipalities where the Macedonian representatives are from.

We congratulate all the students for the excellent performance at this Olympics and we are convinced that the successes in the future will be even greater.

References:

- [1] International Junior Science Olympiad, official site, <https://ijsso2019.edu.gov.qa/>
- [2] M. Stojanovska, Participation of Macedonian team at the 14th International Junior Science Olympiad, Arnhem – Nijmegen, The Netherlands, 4–12 December 2017, *Maced. J. Chem. Chem. Eng.* **36** (2), 297–298 (2017).
- [3] M. Stojanovska, Participation of Macedonian team at the 15th International Junior Science Olympiad In Gaborone, Botswana, 2–12 December 2018, *Maced. J. Chem. Chem. Eng.* **38** (1), 137–138 (2019).

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