29th International Conference of Young Scientists (ICYS)



BOOKLET



1994, Visegrád, Hungary;

1995, Baranovichi, Belarus;

1996, Visegrád, Hungary;

1997, Baranovichi, Belarus;

1998, Visegrád, Hungary;

1999, Branovichi, Belarus;

2000, Nijmegen, The Netherlands;

2001, Katowice, Poland

2002, Kutaisi, Georgija,

2003, Prague, Czech Republic

2004, Nijmegen, The Nederlands

2005, Katowice, Poland;

2006, Stuttgart, Germany;

2007, Saint-Petersburg, Russia;

2008, Chernivtsi, Ukraine;

2009 Pszczyna, Poland;

2010, Bali, Indonesia;

2011 Moscow, Russia;

2012, Nijmegen, The Netherlands;

2013, Bali, Indonesia;

2014, Belgrade, Serbia;

2015, Izmir, Turkey;

2016, Cluj-Napoca, Romanija

2017, Stuttgart, Germany;

2018, Belgrade, Serbia;

2019, Kuala Lumpur, Malaysia

2020,

2021, Onlajn

2022, Onlajn





STEERING COMMITTE OF ICYS

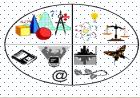




Hans Jordens vice-president



Sergei Sergeev president

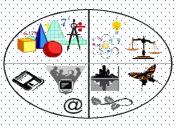




Adelhaida Kerekes vice-president



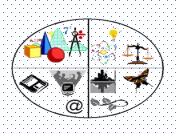
Monika Raharti member



Urszula Woznikowska-Bezak member



Leonid Markovich member

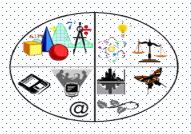




Zsuzsanna Rajkovits honorary president



Alexander Urban member



DESCRIPTION AND MISSION OF THE ORGANIZER

Center for Talents emerged as a compelling necessity for guiding talented individuals in the fields of natural, technical, social and humanistic sciences. The Center serves the need for the development of domestic science, technological and other funds of knowledge based on our own research work and application of results-based national development programs in all work areas. This approach is imposed by modern international research and development, as well as market processes, and the global struggle for competitive products, services and knowledge.



Modern tendencies - maximum use of natural resources, compliance with the requirements of preservation and environmental protection, restructuring and modernization of the economy, rapid development of food production, energy, electronics, metallurgy, chemical industry, information technology - imposed the necessity of systematic detection, identification and stimulation of gifted individuals. In order to respond to current challenges of the modern education system and especially the implementation of the Programme of encouraging and training young researchers, the Center for Talents supports the work with gifted individuals in various scientific fields. The work of the Center is aimed at revealing and identifying talented individuals and, with the involvement of the scientists as teachers and mentors, providing gifted students with the conditions for their development in the scientific area of interest. Through implementation of the planned program assignments, Center for Talents strives to make a valuable contribution to the development and promotion of science through discovering talented children and supporting their engagement in scientific research.

,

LOC



Doc Dr Ivan Novkovic



Nevena Nekić



Mateja Opačić



Nikola Srzentić



Tamara Gojić



Ankica Dmitrovic

ROMANIA INDONESIA

HUNGARY



CZECH REPUBLIC THAILAND

RUSSIA

IRAN

SERBIA

SCHEDULE

| 08. APRIL SUBOTA/SATURDAY | | | | |
|---------------------------|---------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--|--|
| | Dolazak ARRIVAL | Transfer from the airport to the hotel is provided | | |
| | SMEŠTAJ ACCOMMODATION | checking in at the reception, getting room keys. | | |
| 14.00 - 16.00 | RUČAK LUNCH | | | |
| 16.00 - 19.00 | RADIONICA POSVEĆENA USKRSU WORKSHOP DEDICATED TO EASTER | Collecting ID cards, Getting to know students, socializing, preparing decorations for Easter. | | |
| 19.00 - 20.30 | VEČERA DINNER | | | |
| 20.00 | TIM LIDER SASTANAK TEAM LEADER MEETING | cocktail party for TEAM LEADERS | | |
| | | | | |

| 09. APRIL NEDELJA/SUNDAY | | | | | |
|--------------------------|---------------------------------------------------------------------|-------------------------------------|--|--|--|
| 08.00 - 09.00 | DORUČAK BREAKFAST | | | | |
| 09.30 - 14.00 | OBILAZAK ZNAMENITOSTI BEOGRADA TOUR OF THE SIGHTS OF BELGRADE | BOTANIČKA BAŠTA BOTANICAL GARDEN | | | |
| 14.30 - 15.30 | RUČAK LUNCH | | | | |
| 17:00 | SVEČANO OTVARANJE OPENING CEREMONY | | | | |
| 18.30 - 20.30 | VEČERA DINNER | | | | |
| 20:00 | STIRLING COMMITTEE MEETING | | | | |

| 10. APRIL PONEDELJAK/MONDAY | | | | | |
|-----------------------------|-------------------------------|--|--|--|--|
| | DORUČAK BREAKFAST | | | | |
| 08.00 - 09.00 | | | | | |
| | PREZENTACIJE PRESENTATIONS | | | | |
| 09.00 - 14.00 | | | | | |
| | RUČAK LUNCH | | | | |
| 14.00 - 15.30 | | | | | |
| | PREZENTACIJE PRESENTATIONS | | | | |
| 16.00 - 19.00 | | | | | |
| | VEČERA | | | | |
| 19.00 - 20.30 | DINNER | | | | |

| | 11. APRIL UTORAK/TUESI | DAY |
|---------------|------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| | DORUČAK BREAKFAST | |
| 07.00 - 09.00 | OBILAZAK ZNAMENITOSTI BEOGRADA | |
| 09.30 - 13.00 | TOUR OF THE SIGHTS OF BELGRADE | AVALSKI TORANJ AVALA TOWER |
| 13.00 - 14.30 | RUČAK LUNCH | |
| 16.00 - 18.00 | POSTER PREZENTACIJE POSTER PRESENTATIONS | |
| 19.00 - 20.30 | VEČERA DINNER | |
| | | |
| | | |
| | 12. APRIL SREDA/WEDNES | DAY |
| 08.00 - 10.00 | DORUČAK BREAKFAST | |
| 10.00 - 12.00 | OBILAZAK ZNAMENITOSTI BEOGRADA TOUR OF THE SIGHTS OF BELGRADE | NIKOLA TESLA MUSEUM |
| 13.00 - 14.30 | RUČAK LUNCH | |
| 16.00 - 18.00 | ŠETNJA BEOGRADOM WALKING THROUGH BELGRADE | KALEMEGDAN FORTRESS |
| 19.00 - 20.30 | VEČERA DINNER | |
| 21.00 - 23.00 | KULTURNI PERFORMANSI CULTURAL PERFORMANCES | |
| | 13. APRIL ČETVRTAK/THUR | SDAY |
| 08.00 - 10.00 | DORUČAK BREAKFAST | |
| 11.00 | SVEČANOST DODELE MEDALJA MEDAL AWARD CEREMONY | |
| 13.00 - 14.30 | RUČAK LUNCH | |
| 15.00 - 19.00 | POSETA TRŽNOM CENTRU VISIT TO THE SHOPPING MALL | option to choose: shopping center, science and technology museum, city center, |
| 19.00 - 20.30 | VEČERA DINNER | |
| | 14. APRIL PETAK/FRIDA | Υ |
| 08.00 - 10.00 | DORUČAK / BREAKFAST | |
| | ODLASCI / DEPARTURES | provided transfer from the hotel to the airport |

STUDENTS

| Indonesia | Teresa Azarel Gayatri Lamiang | Environmental Science |
|----------------|----------------------------------|-----------------------|
| Serbia | Anđela Zorić | Environmental Science |
| Hungary | Bence Veres | Environmental Science |
| Thailand | Nyanika Techasitsuebpong | Environmental Science |
| Romania | Suciu Alexia Sofia | Environmental Science |
| Czech Republic | Michala Malá | Environmental Science |
| Hungary | Boglárka Gáspár | Environmental Science |
| Romania | Rogozan Matei | Environmental Science |
| Brazil | Bruno Kayser da Silva Machado | Environmental Science |
| Indonesia | Dhavina Priskila Tjahjadi | Environmental Science |
| Indonesia | Gabrielle Rochellin Susanto | Environmental Science |
| Turkey | Nisa İltekin | Environmental Science |
| Serbia | Teodora Kostic | Environmental Science |
| Turkey | Ayşenur Bayer | Environmental Science |
| Turkey | Ceren Yenideniz | Environmental Science |
| Russia-Moscow | Vladislav Marchuk | Engineering |
| Turkey | Eymen Kaykusuz | Engineering |
| Slovenia | Maša Melinc | Engineering |
| Brazil | Wanghley Soares Martins | Engineering |
| Serbia | Mihajlo Ninkov | Engineering |
| Russia-Moscow | Vladislav Biserov | Computer Science |
| Russia-Moscow | Maxim Molostov | Computer Science |
| Indonesia | Fiona Lee | Computer Science |
| Indonesia | Veronica Jane Sudjana | Computer Science |
| Serbia | Aleksandra Spasojević | Computer Science |
| Romania | Neag Alexandru | Computer Science |

STUDENTS

| Russia-Moscow | Stepan Kalugin | Computer Science |
|------------------------|------------------------------|------------------|
| Serbia | Rajko Lapcevic | Computer Science |
| Thailand | Thee Mateepithaktham | Computer Science |
| Russia-Moscow | Konstantin Korolev | Computer Science |
| Serbia | Milan Mirčić | Computer Science |
| Romania | Rednic Natalia | Life Science |
| Romania | Zirbo Oana-Maria | Life Science |
| Russia-Moscow | Sofia Kiseleva | Life Science |
| Serbia | Dušan Marjanović | Life Science |
| Hungary | Dóra Százvai | Life Science |
| Romania | Rus Maria Cassandra | Life Science |
| Romania | Bledea Iulia | Life Science |
| Russia-Moscow | Darya Zykova | Life Science |
| Czech Republic | Štěpán Boudyš | Life Science |
| Romania | Lotrean Darius | Life Science |
| Russia-Moscow | Anton Fetisov | Life Science |
| Brazil | João Pedro Silvestre Armani | Life Science |
| Slovenia | Neja Štampar | Life Science |
| Serbia | Lena Vračević | Life Science |
| Russia-Moscow | Anastasiia Zhukova | Life Science |
| Serbia | Aleksandra Letić | Life Science |
| Russia - St Petersburg | Pavel Fedorov | Mathematics |
| Indonesia | Jason Mikael Dihardja | Mathematics |
| Czech Republic | Vojtěch Belada | Mathematics |
| Russia - St Petersburg | Aleksandr Krasilnikov | Mathematics |
| Brazil | Victórya Leal Altmayer Silva | Mathematics |
| Serbia | Roman Maksimovich | Mathematics |

STUDENTS

| Russia - St Petersburg | Ilia Grishchenko | Mathematics |
|------------------------|--------------------------------------------|-------------|
| Serbia | Milica Tomić | Physics |
| Slovenia | Žiga Vaupotič | Physics |
| Slovenia | Tian Vesel | Physics |
| Hungary | Dániel Grosser | Physics, |
| Brazil | Anny Gabriela Marçal de Carvalho Araújo | Physics, |
| Thailand | Natatpong Sakmaneevongsa | Physics |
| Hungary | Gergely Péter Vári | Physics, |
| Serbia | Mila Mihajlović | Physics |
| Hungary | Zsombor Gál-Knapcsek | Physics, |
| | | |

| | NUMBER OF PRESENTATIONS |
|-----------------------|-------------------------|
| ENGINEERING | 7 |
| PHYSICS | 8 |
| MATHEMATICS | 8 |
| COMPUTER SCIENCES | 9 |
| ENVIRONMENTAL SCIENCE | 14 |
| LIFE SCIENCE | 14 |
| | |

REPRESENTATIVES OF THE COUNTRY - TEAM LEADERS

| Germany | Alexander Urban | REPRESENTATIVE OF THE COUNTRY |
|------------------------|----------------------|-------------------------------|
| Hungary | Zsuzsanna Rajkovits | REPRESENTATIVE OF THE COUNTRY |
| Russia - St Petersburg | Andrei Potemkin | REPRESENTATIVE OF THE COUNTRY |
| Russia-Moscow team | Sergei Sergeev | REPRESENTATIVE OF THE COUNTRY |
| Slovenia | Vesna Fabjan | REPRESENTATIVE OF THE COUNTRY |
| Indonesia | Monika Raharti | REPRESENTATIVE OF THE COUNTRY |
| Romania | Adelhaida Kerekes | REPRESENTATIVE OF THE COUNTRY |
| Indonesia | Antonius Malem Barus | TEAM LEADER |
| Serbia | Nikola Srzentic | REPRESENTATIVE OF THE COUNTRY |
| Romania | Lavinia Mureșan | TEAM LEADER |
| Czech Republic | Jitka Anna Tanka | TEAM LEADER |
| Romania | Boar Felicia | TEAM LEADER |
| Russia - St Petersburg | Boris Zolotov | TEAM LEADER |
| Russia-Moscow team | Mikhail Tokarev | TEAM LEADER |
| Hungary | Kirchkeszner Csaba | TEAM LEADER |
| Thailand | Amarisa Chantanasiri | TEAM LEADER |
| Romania | Cazan Ioana | TEAM LEADER |
| Turkey | Cansu İlke Kuru | TEAM LEADER |
| Turkey | Gülseren Coşkun | TEAM LEADER |
| Turkey | Senem Kızak | TEAM LEADER |
| Turkey | Belit Karaca | TEAM LEADER |
| Brazil | Janayna Panoch | TEAM LEADER |
| | | |
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JURY

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| W V I | | | W I PAL | | |

Alexander Urban Germany

Kirchkeszner Csaba Hungary

Boar Felicia Romania

Sanja Živković Serbia

LIFE SCIENCE

Adelhaida Kerekes Romania

Marija Pavlović Serbia

Cansu İlke Kuru TURKEY

Marinela Šokarda Slavić Serbia

MATHEMATICS

Boris Zolotov Russia - St Petersburg

AMARISA CHANTANASIRI THAILAND

Dr. Gülseren COŞKUN TURKEY

Nikolina Markovic Serbia

Matija Ćupić Serbia

PHYSICS/ENGINEERING

Sergei Sergeev Russia-Moscow team

Zsuzsanna Rajkovits Hungary

Kristina Protić Serbia

COMPUTER SCIENCE

Mateja Opačić Serbia

Dmitry Shtukenberg Russia-Moscow team

Antonius Malem Barus Indonesia

"Jevremovac" Arboretum (Botanic Gardens)

"Jevremovac" Arboretum is the unit of the Faculty of Biology of the University of Belgrade. Founded in 1874 by the decree of the Ministry of Education of the Kingdom of Serbia, at the suggestion of Mr. Josif Pančić, its first manager thereafter. In the year 1889, the King Milan Obrenović donated the estate (inherited from his grandfather named Jevrem) to the Great School in Belgrade for the purpose of construction of Botanic Garden, provided it is named "Jevremovac". It exists to this day at the same location and under the same name.

The Arboretum spreads over the area of 5 hectares, where on an open space there are over 250 species of trees and bushes, local, European and exotic plants, and the total plant population now includes about 500 trees, bushes and herbage plants. Besides the open space, the Arboretum covers the Green house and the Institute for Botanic premises. (administrative building, herbarium, library, lecture hall, laboratories).

The green house, built in 1892, covers the area of 500 m2. At the time of its construction it was one of the biggest and most beautiful green houses in this part of Europe. Numerous tropic and sub-tropic plants are being nursed, some of which worth mentioning are: Phoenix Canariensis, Chamaerops Humilis, Cereus Peruvinianus...

The Herbarium accommodates rich collection of plants originating from the Balkan peninsula and the entire Europe containing around 120,000 herbarium sheets and over 300,000 exsiccates. The library is one of the oldest and the most abundant one in this area. Apart from 200 scientific and professional magazines it also accommodates over 6,000 books.



Avala Tower is located 16 km south of Belgrade. Whit its hight of 511 meters, it barely avoided the classification of the hill. Mineral Avalit got its name by the mountain where it was founded. On the protected area of the Avala, there are around 600 plant species. Monument to the Unknown Hero is also located there. Countries that fought in World War I have The Monument to the Unknown Soldier, only Serbia has the Monument to the Unknown Hero. After World War I, the local population found the grave of the unknown Serbian soldier. People from the local villages erected a modest monument to that soldier in 1922. Later, the National Committee for the erection of a monument decided to have a more representative Monument in his honor on the top of Avala mountain. The Monument was built from 1934 to 1938. Remains of a medieval town of Zrnov were destroyed with the dynamite for the purpose of constructing this Monument in 1934.

On the lower part of Avala, the Tower designed by the architects Uglješa Bogdanović and Slobodan Janjic was built in 1965. The Tower was the tallest construction in the former Yugoslavia and the Balkans. It was demolished in the 1999 bombing of NATO forces. By the initiative of a large number of the citizens and the RTS (Radio Television of Serbia) started rebuilding of an identical tower with the use of new technologies. The Avala Tower reopened on April 21, 2010, for visitors. It offers a beautiful panoramic view of the whole Šumadija.





At 119 meters of the tower is the "Panorama Bar" from which there is a magnificent view, almost the same as from the observation deck because it is only 3 meters below it. The space is air-conditioned, has a capacity of about 80 seats and the consumption of tobacco is not allowed.

MONUMENT TO AN UNKNOWN HERO IN AVALA



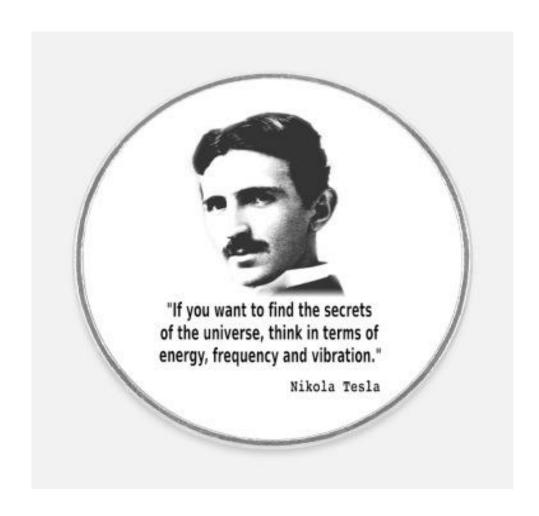
The Monument to the Unknown Hero - Mountain Avala

This magnificent granite memorial atop of Avala is the expression of gratitude to the fallen warriors for freedom in World War I. The first Monument to the Unknown Hero on Avala was built in 1922 by local villagers, in the place of the grave of an unknown fallen soldier. The modern Monument to the Unknown Hero was erected in 1938 based on the design by Ivan Meštrović, in the place of the medieval town of Žrnov.





The **Nikola Tesla Museum** is a science museum located in the central area of <u>BelgradE</u>, Serbia. It is dedicated to honoring and displaying the life and work of Nikola Tesla as well as the final resting place for Tesla. It holds more than 160,000 original documents, over 2,000 books and journals, over 1,200 historical technical exhibits, over 1,500 photographs and photo plates of original, technical objects, instruments and apparatus, and over 1,000 plans and drawings. Very little is on display in the small ground floor exhibition space.



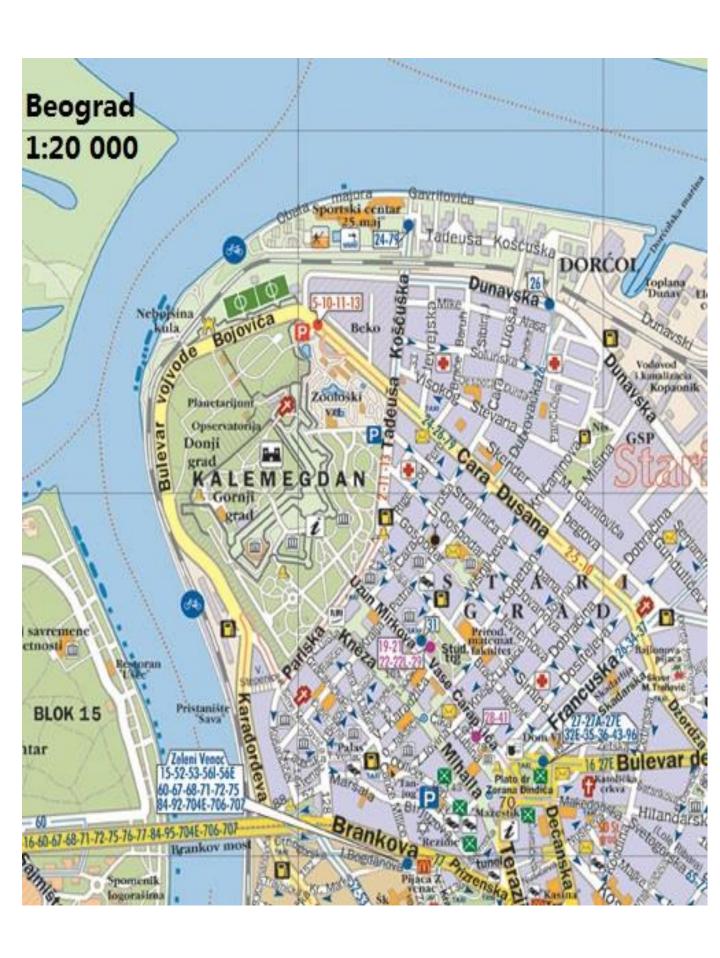


The Belgrade fortress, built on a white ridge above the confluence of two big rivers, destroyed and rebuilt over and over for 16 centuries, still stands as the symbol of Serbia's capital

This core, from which modern Belgrade developed, was first built at the beginning of the 1st century. During its long history, it was a silent witness to changes in power as a castrum, castel, medieval and artillery fortification. Because of this, it was repeatedly attacked and demolished. It is divided into Lower and Upper town. The position of the fortress on Kalemegdan is extremely favorable - this is where the Sava and Danube meet, the Balkan Peninsula and the Pannonian Plain. During its history, the fortress was conquered by the Huns, Hungarians, and Ottomans, it was damaged during the First World War and occupied during the Second World War.



It is a pedestrian zone and shopping center - protected by law as one of the oldest and most valuable monumental complexes of the city, with a large number of representative buildings and urban houses built at the end of 1870s. It is thought that in as early as the Roman times there was the center of the Singidunum settlement. In this area, at the time of Turks, there were winding streets with gardens, drinking-fountains and mosques. In the middle XIX century, in the upper part of the street was the garden of Knez Aleksandar Karaðorðević. After the making of the regulation plan of Belgrade in 1867, by Emilijan Josimović, the street has soon been built and gained its physionomy and content. The houses have been built there and the most influential and wealthiest families of the commercial and political society of Belgrade have come to live there. In 1870, the city authorities officially gave a name to this street - Ulica Kneza Mihaila.





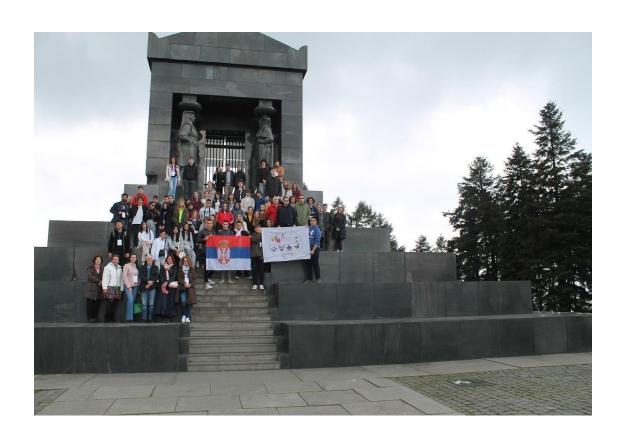




THE WINNERS

| ENGINEERING | | | | |
|--------------------|-------------------------------|---------------|--|--|
| Brazil | Wanghley Soares Martins | GOLD | | |
| Russia-Moscow team | Vladislav Marchuk | SILVER | | |
| Serbia | Mihajlo Ninkov | BRONSE | | |
| EN | VIRONMENTAL SCIENCE | | | |
| Romania | Rogozan Matei | GOLD | | |
| Romania | Suciu Alexia Sofia | GOLD | | |
| BRAZIL | Bruno Kayser da Silva Machado | SILVER | | |
| Indonesia | Teresa Azarel Gayatri Lamiang | BRONSE | | |
| Serbia | Anđela Zorić | SILVER | | |
| Hungary | Bence Veres | SILVER | | |
| Thailand | Nyanika Techasitsuebpong | BRONSE | | |
| Hungary | Boglárka Gáspár | BRONSE | | |
| Indonesia | Dhavina Priskila Tjahjadi | | | |
| | Gabrielle Rochellin Susanto | BRONSE | | |
| | | | | |
| Thailand | Thee Mateepithaktham | GOLD | | |
| Serbia | Aleksandra Spasojević | GOLD | | |
| Serbia | Rajko Lapcevic | BRONSE | | |
| Russia-Moscow | Konstantin Korolev | BRONSE | | |
| Serbia | Milan Mirčić | BRONSE | | |
| | PHYSICS | | | |
| Hungary | Dániel Grosser | GOLD | | |
| Hungary | Zsombor Gál-Knapcsek | GOLD | | |
| Hungary | Gergely Péter Vári | SILVER | | |
| | Žiga Vaupotič | | | |
| Slovenia | Tian Vesel | BRONSE | | |
| Thailand | NATATPONG SAKMANEEVONGSA | BRONSE | | |
| Serbia | Mila Mihajlovic | BRONSE | | |
| | | | | |

| | LIFE SCIENCE | |
|------------------------|------------------------------|--------|
| Romania | Lotrean Darius | GOLD |
| Russia-Moscow team | Anton Fetisov | GOLD |
| | Rednic Natalia | |
| Romania | Zirbo Oana-Maria | SILVER |
| | Rus Maria Cassandra | |
| Romania | Bledea Iulia | SILVER |
| Czech Republic | Štěpán Boudyš | SILVER |
| Russia-moscow team | Sofia Kiseleva | BRONSE |
| Serbia | Dušan Marjanović | BRONSE |
| Hungary | Dóra Százvai | BRONSE |
| Brazil | João Pedro Silvestre Armani | BRONSE |
| Slovenia | Neja Štampar | BRONSE |
| | MATHEMATICS | |
| Serbia | Roman Maksimovich | GOLD |
| Czech republic | Vojtěch Belada | SILVER |
| Russia - St Petersburg | Aleksandr Krasilnikov | SILVER |
| Brazil | Victórya Leal Altmayer Silva | BRONSE |
| Russia - St Petersburg | Ilia Grishchenko | BRONSE |



Telekom Srbija



Fondacija 1%





