

2ND YAKUTIA INTERNATIONAL SCIENCE GAMES RUSSIA 2022



100th anniversary of the Yakut ASSR





Under the patronage of:







Organizers:









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3rd YAKUTIA INTERNATIONAL SCIENCE FAIR

July 5-10, 2022



WELCOME TO PARTICIPANTS

Dear participants,

The International Science Games held in the Sakha Republic (Yakutia) give children the opportunity to develop spiritually and intellectually, feel the atmosphere of global science and become smarter people. These games are a very important event for our republic.



The work with gifted children has been going on for several years at the Sakha Junior Science

Academy. All events of the International Science Games help improve the abilities of our children. They will work and interact not only with teachers, but also with scientists, as well as students from different universities, opening their minds and growing up as researchers.

I look forward to International Science Games becoming an exciting, remarkable and memorable event for everyone.

IRINA LYUBIMOVA
Minister of Education and Science

of the Sakha Republic (Yakutia)

WELCOME TO PARTICIPANTS



Dear participants,

I would like to congratulate you on the occasion of the inception the Yakutia International Science Fair after the pandemic induced gap year!

The science and scientific collaboration go on albeit all the restrictions and difficulties. It is not a matter of mere perseverance but rather of a common inquiry and curiosity entwined with exploratory mindset. These innate qualities define our experiences and determine our life's trajectory.

The Sakha Junior Science Academy as an educational organization for enabling and facilitating the development of talented and gifted school students exists for more than 20 years. The Yakutia International Science Fair is an annual event and a joint venture with North-Eastern Federal

University Lyceum designed to attract the best research projects from the most successful science-oriented school communities of Europe and Asia, as well as the Americas.

The most exciting part of this story is that we are in the middle of a mega region – Eastern Siberia. It fully sits on permafrost, a relict continuous ice sheet, and covers a Cambrian lagoon seabed that supported the occurrence of the first multicellular organisms more than 560 million years ago. Taiga and tundra, as well as the longest light day are the perfect backdrop for the YISF.

YISF is an endeavor that unites different school communities, judging panel experts, researchers, science project supervisors and volunteers. I am deeply honored to be a part of this wonderful symphony and sincerely thank every one of you for taking part and helping to run it!

I wish you all the success in presenting your research project and organizing this festival of science!

Dr VASILII PAVLOVRector of the Sakha Junior Science Academy

WELCOME TO PARTICIPANTS

Dear participants,

The Sakha Republic (Yakutia) is one of the most unique places on Earth with pristine purity of nature, an amazing variety of flora and fauna, and diversity of natural resources. Since Peter the Great Yakutia has been at the cutting edge of nature studies. The most famous Russian scientists conducted their research here. It is Yakutia where Vitus Bering's Great Northern Expedition and other pioneering expeditions had their start.

I welcome all the participants and organizers of Yakutia International Science Fair. I am sure this event will start many new scientific projects, and will become the fruitful continuation of existing research works in many scientific fields. I believe that the participants of Science Fair from



other regions and countries will find new inspiration and gain unique experiences from our amazing northern region.

I am confident that this wonderful Science Fair will develop and popularize science education among children and youth in the future. I wish the participants to find new friends with whom you will keep cooperating, will work together, and will make new projects.

After all, as you know, science is an international field, and great scientific discoveries necessary for humanity are made precisely in such teams. I think that within the framework of your cooperation and projects you will ensure prosperity for the whole world!

VLADIMIR EGOROV
Director General of the Trust Fund
for Future Generations
of the Sakha Republic (Yakutia)

THE SAKHA REPUBLIC (YAKUTIA)



Yakutia, or the Sakha Republic is the largest region of the Russian Federation. Its total area is 3,103,200 sq kilometers, occupying one fifth of all the territory of Russia. Permafrost of Yakutia keeps many mysteries that attract tourists who are interested in ancient fauna from all over the world. A significant part of all the world's known unique remains of mammoths, woolly rhinoceros, bison, musk oxen, and cave lions was found here.

The Pole of Cold is situated in Oimyakon Ulus of Yakutia, where the lowest temperature

of -71.2 degrees Celsius was registered. It is also the only place on Earth where people live and work in such cold temperatures. The summer is short but hot, temperature can hit +40 degrees Celsius. Here one can see such a unique natural phenomenon as Aurora Borealis, or northern lights. Here, beyond the Polar Circle, the night lasts all winter, and the day is all summer.

Yakutia is famous for its rich natural resources. Rich diamond fields are in Western Yakutia, gold deposits are in the rivers Aldan, Indigirka and Yana. More than 90% of diamonds and 40% of gold in Russia are mined in Yakutia.

The culture of Yakutia is very diverse and formed by traditions and languages of the Sakha,

Russians, indigenous people of the North: Even, Evenk, Chukchi, Dolgan and Yukagir.

Yakutia is a land of dense taiga wilderness and immense tundra zones, hundreds of thousands of large and small rivers and lakes, untouched nature, original culture and hospitable people. All this is Yakutia, the Sakha Republic. It is very different in all of its aspects: simple and unique, lucid and mystical, beautiful and harsh, distant and familiar, one of the few sites on Earth where one can feel that our planet is a living being!



YISF PROGRAMME

	JULY 5, TUESDAY		
Time	Event	Venue	
9.00-12.00	Arrival and check-in. Accreditation		
13.30-14.00	Orientation meeting for participants		
14.00-14.30	Orientation meeting for team leaders	International Arctic School	
16.00	Orientation meeting for judges		
20.00-21.30	Ice-break party		
	JULY 6, WEDNESDAY		
10.00-11.00	Excursions	According to the schedule of tours	
14.00-14.40	YISF Opening Ceremony		
14.40	Group photo	KFEN NEFU	
15.00-18.00	Oral presentations		
20.00-21.30	Talent show, games	International Arctic School	
	JULY 7, THURSDAY		
10.00-11.00	Excursions	According to the schedule of tours	
14.00-15.00	Preparing for poster session	WEEN NEED	
15.00-18.00	Poster session for experts	KFEN NEFU	
20.00-21.30	Leisure event	International Arctic School	
	JULY 8, FRIDAY		
10.00-13.00	Public poster session	KFEN NEFU	
15.00-17.00	Excursions	According to the schedule of tours	
19.30-20.30	Expert lectures	VEEN NEED	
20.30-21.15	Summing up the results	KFEN NEFU	
	JULY 9, SATURDAY	11/1/11/11	
10.30-12.00	Lectures	ULK Sakha Junior Science Academy	
14.00-14.45	Excursion to the Museum of Education (Group 1)		
14.00-14.45	Excursion to the Library-Archive of the First President of the Sakha Republic (Yakutia) Mikhail Nikolaev (Group 2)	According to the schedule of tours	
15.00-16.30	Meeting with the press		
17.00-18.00	YISG Closing Ceremony (with an online broadcast). Awarding	Sakha Junior Science Academy	
21.00	Friendship evening	International Arctic School	
MIII	JULY 10, SUNDAY		
0.15	Departure of participants	International Arctic School	

MATHEMATICS, COMPUTER SCIENCE AND INFORMATION TECHNOLOGY

Country	Region	Participant	School	Grade	Project
Russia	Yakutia	Aiaal Okoneshnikov	Specialized Educational Scientific Center of the Ammosov North- Eastern Federal University	10	
Russia	Yakutia	Darkhan Shestakov	Specialized Educational Scientific Center of the Ammosov North- Eastern Federal University	10	Opening the door using an EEG sensor
Russia	Yakutia	Nikita Kirillin	Specialized Educational Scientific Center of the Ammosov North- Eastern Federal University	10	
Russia	Yakutia	Alexey Davletov	Sakha Polytechnic Lyceum	9	
Russia	Yakutia	Anatoliy Kondratiev	Sakha Polytechnic Lyceum	9	Construction of a mobile monitoring system to study the climate conditions of the premises
Russia	Yakutia	Denis Pavlov	Sakha Polytechnic Lyceum	9	of the premises
Russia	Yakutia	Alexey Zakharov	L.V. Kirenskiy Amga Lyceum	9	Using data of satellite sentinel II to find out degradation of agricultural land of the state farm «Amginsky»
Russia	Yakutia	Arkadiy Tastygin	V.P. Larionov Maya Secondary School	7	Drawing up stereometric tasks using 3D modeling on the example of Yakut architectural structures
Russia	Yakutia	Dayana Nogovitsyna	Specialized Educational Scientific Center of the Ammosov North- Eastern Federal University	10	Mathematical methods in the study of traffic flow in the city of Yakutsk
Russia	Yakutia	Duolan Noev	S.K. Makarov Churapcha Gymnasium	10	Controller for gas boilers «Aton» and «Lemax» in the northern regions
Russia	Yakutia	Irina Sleptsova	International Arctic School	10	Popularization of paleontology of Yakutia through information technologies
Russia	Yakutia	Danil Zelensky	E.A. Varshavsky Information Technology Lyceum No. 24	10	Simul - youth development ecosystem
Russia	Yakutia	Vadim Bykov	E.A. Varshavsky Information Technology Lyceum No. 24	10	
Russia	Yakutia	Kirill Fedotov	Yakutsk City National Gymnasium	8	Minimal surfaces or the mathematics of soap films

Russia	Yakutia	Konstantin Aleksandrov	A.N. Chusovskoy Nyurba Technical Lyceum	8	Problems about wise men and caps
Russia	Yakutia	Nadezhda Egorova	Berdigestyakh Ulus Gymnasium	10	Development of an educational computer game on the topic:
Russia	Yakutia	Petr Egorov	Berdigestyakh Ulus Gymnasium	10	"Metabolism and energy. Metabolism"
Russia	Stavropol Krai	Vladislav Kalinichenko	Specialized Educational Scientific Center of North-Caucasus Federal University	10	Moonar: self-treatment Mobile Application
Singapore		Karis Yuen Xin Er	NUS High School	12	Al Driver data analytica
Singapore		Sean Lim Shi-An	NUS High School	12	Al-Driven data analytics
Russia	Yakutia	Kyunney Sergucheva	F.I. Avdeeva Palace of Children's Creativity Quantorium	10	A robot for cleaning ventilations systems - Venta

PHYSICS, ASTRONOMY AND ENGINEERING

Country	Region	Participant	School	Grade	Project
Russia	Sverdlovsk Oblast	Alexander Dumov	Specialized Educational Scientific Center of Ural Federal University	8	Developing of the non-invasive flowmeter for opaque pipes
Russia	Yakutia	Anzhelina Ageeva	Berdigestyakh Ulus Gymnasium	7	Study of the camera-obscura
Russia	Sverdlovsk Oblast	Daria Korionova	Specialized Educational Scientific Center of Ural Federal University	8	Ball on membrane: identifying sound sources
Russia	Rostov Oblast	David Gabaraev	Specialized Educational Scientific Center of the Southern Federal District	10	A model of a reusable launch vehicle
Russia	Yakutia	Elizaveta Kopyrina	V.P. Larionov Physics and Technology Lyceum	10	Improving the quality of concrete through the use of polymer additives
Russia	Yakutia	Erchim Porokhonko	International Arctic School	8	Electric mapping based on a gyro scooter
Russia	Rostov Oblast	Kristina Kurmak	Specialized Educational Scientific Center of the Southern Federal District	10	Structural characterization of Pb nanoparticles by IR spectroscopy
Russia	Rostov Oblast	Mikhail Pletnev	Specialized Educational Scientific Center of the Southern Federal District	10	

Russia	Yakutia	Konstantin Grigoriev- Kanaev	Oktemsk Science and Education Center	8	
Russia	Yakutia	Lev Maksimov	Oktemsk Science and Education Center	8	Universal power plant
Russia	Yakutia	Pavel-Ayastaan Antonov	Oktemsk Science and Education Center	8	
Russia	Yakutia	Semen Platonov	S.K. Makarov Churapcha Gymnasium	9	Experimental search for the ways to get a piezoelectric biogenerator film from fish scales
Russia	Yakutia	Timur Katanov	Specialized Educational Scientific Center of the Ammosov North- Eastern Federal University	10	System of measuring the water level
Russia	Yakutia	Vyacheslav Gogolev	Specialized Educational Scientific Center of the Ammosov North- Eastern Federal University	10	in water bodies for monitoring flood situations
Russia	Yakutia	Valeria Pavlova	Specialized Educational Scientific Center of the Ammosov North- Eastern Federal University	10	Silver nanoparticle size determination
Russia	Yakutia	Vasilii Sleptsov	Specialized Educational Scientific Center of the Ammosov North- Eastern Federal University	10	using wavelet processing
Russia	Sverdlovsk Oblast	Yuliya Igosheva	Specialized Educational Scientific Center of Ural Federal University	10	Physics and statistics of the three-sided dice
Russia	Yakutia	Aisen Mokhnachevsky	Specialized Educational Scientific Center of the Ammosov North- Eastern Federal University	10	
Russia	Yakutia	Sandara Afanasyeva	Yakutsk Secondary School No.7	10	Research of the rubber blend properties based on Butadiene-Nitrile and diene rubber
Russia	Yakutia	Danil Okhlopkov	Specialized Educational Scientific Center of the Ammosov North- Eastern Federal University	10	
Russia	Yakutia	Maksim Zakharov	F.I. Avdeeva Palace of Children's Creativity Quantorium	9	Development of a smart heater on HFC for the Snow Man IT jacket
Russia	Yakutia	Valeriy Maksimov	F.I. Avdeeva Palace of Children's Creativity Quantorium	9	

Russia	Yakutia	Veronika Chernikova	Mokhsogollokh Secondary School	10	Signals of long-range radio navigation influenced by the solar eclipse on June 10, 2021
Russia	Yakutia	Vladislav Sleptsov	S.K. Makarov Churapcha Gymnasium	10	Using a homemade heat pump for cars in the Arctic

LIFE SCIENCES, ENVIRONMENTAL SCIENCES AND CHEMISTRY

Country	Region	Participant	School	Grade	Project
Russia	Yakutia	Aiyskhan Katanov	Anabar Ulus Gymnasium	10	Study of the physical properties of collagen hydrolyzate produced from the northern fish swim bladder.
Russia	Yakutia	Aleksandr Ignatiev	I.G. Timofeev Maya Lyceum	9	Study of methods of water purification from oil pollution
Russia	Yakutia	Aleksandr Monastyrev	Republican Boarding School	10	
Russia	Yakutia	Bogdan Burtsev	Specialized Educational Scientific Center of the Ammosov North- Eastern Federal University	10	Development of a test system for the detection of infectious diseases in
Russia	Yakutia	Sergey Ivanov	Republican Boarding School	10	northern crops using genetic markers
Russia	Yakutia	Yuvenalia Ivanova	International Arctic School	10	
Russia	Yakutia	Anton Alekseyev	'Aiyy Kyhata' National Gymnasium	9	Analysis of the latest research on bioprosthetics of lost limbs in the rehabilitation of disabled people. Problems and prospects of the industry in Russia
Russia	Yakutia	Ayaal Lobanov	L.V. Kirensky Amga Lyceum named after	5	Traces of the past in the Amga Valley
Russia	Yakutia	Aysaar Nikolaev	Berdigestyakh Ulus Gymnasium	10	Study of the species composition and distribution of Lepidoptera environs of the village of Berdigestyakh in Gorny district
Russia	Yakutia	Naryiaana Petrova	Berdigestyakh Ulus Gymnasium	10	
Russia	Yakutia	Diana Sleptsova	Batagay Secondary School	7	Testing varieties of Jerusalem artichoke and substrates for growing in the conditions of the Arctic zone

Russia	Yakutia	Ekaterina Nikiforova	Specialized Educational Scientific Center of the Ammosov North- Eastern Federal University	10	Developing medical glue made of natural rubber
Russia	Yakutia	Erel Fedorov	Anabar Ulus Gymnasium	8	Determination of the age composition of fish in reservoirs of Saskylakh
Russia	Yakutia	Erkin Nogovitsyn	International Arctic School	8	Research of flavonoids of Veronica grey growing in Central Yakutia in comparative aspect
Russia	Yakutia	Kunnei Mamatkulova	V.P. Larionov Maya Secondary School	9	Study and comparison of the qualitative and quantitative composition of the analysis of the Buluus and IrbatMuus media
Russia	Yakutia	Nurgun Vasiliev	S.K. Makarov Churapcha Gymnasium	8	Investigation of landscape changes in the village of Churapcha using drone photos and satellite images in the Google Earth Geoinformation System
Russia	Yakutia	Sargylana Nagly	Olekminsk Center for Creative Development and Humanitarian Education of School Students	10	Phenology of the dissected hogweed in the conditions of the Olekminsky distric
Russia	Yakutia	Uruiana Sokolnikova	Republican Boarding School	10	Study of the physical and mechanical properties of PLA samples and evaluation of adhesion of cell culture
Russia	Yakutia	Vladislav Uvarov	L.V. Kirensky Amga Lyceum	7	Biological features of large-root pemphigus on the example of reservoirs of the Amga river valley
Russia	Yakutia	Artyom Ishbaev	Yakutsk Secondary School No. 13	10	Strategy for dissemination of first aid skills when stopping breathing and blood circulation among the population of Yakutia as a measure to improve the overall level of public health of the population of the arctic regions of Yakutia on the example of the experience of implementing the strategy of secondary school Nº13 of the city of Yakutsk in the Sakha Republic (Yakutia)

Russia	Yakutia	Aital Ivanov	Yakutsk Secondary School No. 7	10	Comparative analysis of alkaloid content bulbous plants grown in domestic conditions
Russia	Yakutia	Emma Okhlopkova	Yakutsk Secondary School No. 7	10	Biological method of recycling polyethylene waste using wax moth larvae
Singapore		Vanniyarajan Kailaashnaath	NUS High School	12	Characterization of mitochondrial permeability transition pore components
Russia	Yakutia	Kristina Skrybykina	Specialized Educational Scientific Center of the Ammosov North- Eastern Federal University	10	Influence of different types of fillers on the properties and structure of polytetrafluoroethylene
Singapore		Manivannan Harini	NUS High School	12	A comparative study on the characteristics of the inflow path of fine dust and the trend of climate change in Korea and Singapore using satellite data
Singapore		Sean Lim Shi-An	NUS High School	12	
Singapore		Karis Yuen Xin Er	NUS High School	12	
Singapore		Manivannan Harini	NUS High School	12	Sustainable nano-fibrous scaffold for dental tissue engineering
Singapore		Sean Lim Shi-An	NUS High School	12	

SOCIAL SCIENCES AND HUMANITIES

Country	Region	Participant	School	Grade	Project
Russia	Rostov Oblast	Alina Kashapova	Specialized Educational Scientific Center of the Southern Federal District	8	
Russia	Rostov Oblast	Elizaveta Lysenko	Specialized Educational Scientific Center of the Southern Federal District	10	Manipulation across genres in
Russia	Rostov Oblast	Sofia Ignatova	Specialized Educational Scientific Center of the Southern Federal District	10	Russian- and English-speaking media
Russia	Rostov Oblast	Maria Petropavlovska- ya	Specialized Educational Scientific Center of the Southern Federal District	8	

Russia	Yakutia	Alisa Staniclavskaya	Academician L.V. Kirensky Amga Lyceum	8	Demographic map of the Zarechye district of Sakha Republic
Russia	Yakutia	Aman Zhirkov	V.P. Larionov Maya Secondary School	10	The use of meat and bone waste from sawing meat for the production of pet food «Please your pet»
Russia	Stavropol Krai	Anastasia Ilyuschenko	Specialized Educational Scientific Center of North-Caucasus Federal University	10	Music as an instrument of moral and ethical education of adolescents.
Russia	Stavropol Krai	Valeria Rybnikova	Specialized Educational Scientific Center of North-Caucasus Federal University	10	Comparison of popular music of the 1980s and today
Russia	Yakutia	Anastasia Kasyanova	Specialized Educational Scientific Center of the Ammosov North- Eastern Federal University	10	Semantics and functioning of emojis in Japanese and Russian written text on the example of Twitter
Russia	Yakutia	Ariana Gotovtseva	N.S. Okhlopkov Nam Ulus Gymnasium	6	"Khatyn" - eco-paper from fallen leaves
Russia	Yakutia	Arsen Mordosov	Specialized Educational Scientific Center of the Ammosov North- Eastern Federal University	10	Cultural codes: representation of celestial bodies in English, Russian and Yakut riddles
Russia	Yakutia	Damir Prokopiev	V.P. Larionov Maya Secondary School	8	From the history of the first conscription to the army in 1941 from the Megino-Kangalassky district
Russia	Yakutia	Darkhan Zhirkov	V.P. Larionov Maya Secondary School	9	Organization of family apiary and realization of natural honey and products made with honey
Russia	Yakutia	Dayaana Titova	Sakha Polytechnic Lyceum	8	Panorama of historical events in the novel «Adaga» ("Burden") by Nikolai Yakutsky
Russia	Yakutia	Dayana Yu	Berdigestyakh Ulus Gymnasium	7	Reflection of the culture and traditions of Sakha people in material culture objects of my ancestors
Russia	Yakutia	Diana Borisova	V.P. Larionov Maya Secondary School	9	From postcards to e-mail letter and picture description
Russia	Yakutia	Innokentiy Laptev	"Aiyy Kyhata" National Gymnasium	6	Web-quest "Chess Strategies in Business'
Russia	Yakutia	Milana Lapteva	International Arctic School	8	

Russia	Yakutia	Nikolay Smirnikov	V.P. Larionov Maya Secondary School	8	Geocultural approach to the disclosure of images of children in works "Khachygyr" by Erilik Eristiine and «Vanka» by Anton Chekhov
Russia	Yakutia	Polina Parfenova	A.V. Dmitriev Oy Secondary School	10	Beakheaded horse among the Yakuts» (on the example of museum exhibits)
Russia	Yakutia	Silvia Protopopova	N.S. Okhlopkov Nam Ulus Gymnasium	10	Historical sources in perpetuating the memory of I.E. Vinokurov and M.K. Ammosov, prominent politicians and statesmen
Russia	Stavropol Krai	Timofei Kocherga	Specialized Educational Scientific Center of North-Caucasus Federal University	10	Conducting a comparative analysis of the content of the Unified State Exam and FCE for the transfer of the results of the research through the creation of a technological product (video podcast) of language learning using modern methods and teaching tools
Russia	Yakutia	Timur Krivogornitsyn	V.P. Larionov Maya Secondary School	5	Cards with images of animals and birds of Yakutia with a brief description in Sakha language
Russia	Yakutia	Uygulaana Vinokurova	N.S. Okhlopkov Nam Ulus Gymnasium	7	The influence of foreign languages on the development of the Yakut language
Russia	Yakutia	Valeria Danilova	Specialized Educational Scientific Center of the Ammosov North- Eastern Federal University	10	Lexical and semantic characteristics of statuses in Russian on WhatsApp messenger
Russia	Yakutia	Yana Fedorova	Specialized Educational Scientific Center of the Ammosov North- Eastern Federal University	10	Stylistic features of the English language song discourse on the example of a group twenty one pilots
Russia	Yakutia	Yaroslava Popova	Specialized Educational Scientific Center of the Ammosov North- Eastern Federal University	10	Speech portrait of the main character of Pavel Sanaev's story «Bury me behind the basrboard»
Russia	Yakutia	Maria Chepina	Specialized Educational Scientific Center of the Ammosov North- Eastern Federal University	10	Japanese comics as a type of text: emotivity category
Russia	Yakutia	Lyubov Popova	Specialized Educational Scientific Center of the Ammosov North- Eastern Federal University	10	Linguistic and cultural features of the Yakutsk rock band names

YISF JUDGES

Country	Region	Name	Category
Russia	Yakutia	Niurgun Lazarev, Dr. Sc. PhysMath., Chief Researcher, Research Institute of Mathematics, NEFU	Mathematics, computer science and information technology
Russia	Yakutia	Valentin Alekseev, Cand. Sc. PhysMath., Junior Researcher, Computational Technologies for Modeling Multiphysical and Multiscale Permafrost Processes Laboratory, NEFU	Mathematics, computer science and information technology
Russia	Yakutia	Vasiliy Grigoriev, Junior Researcher, Computational Technologies for Modeling Multiphysical and Multiscale Permafrost Processes Laboratory, NEFU	Mathematics, computer science and information technology
Russia	Yakutia	Denis Spiridonov, Cand. Sc. PhysMath., Senior Researcher, Computational Technologies for Modeling Multiphysical and Multiscale Permafrost Processes Laboratory, NEFU	Mathematics, computer science and information technology
Russia	Yakutia	Ayal Timofeev, Dr. Sc. PhysMath., Associate Professor, Department of Thermal Physics and Thermal Power Engineering, Institute of Physics and Technology, NEFU	Physics, Astronomy and Engineering
Russia	Yakutia	Anastasiia Ammosova, Cand. Sc. PhysMath., Project Manager, Sinet Spark, Researcher, Yu.G. Shafer Institute of Cosmophysical Research and Aeronomy of Siberian Branch of the Russian Academy of Sciences	Physics, Astronomy and Engineering
Russia	Yakutia	Marina Fedotova, Cand. Sc. Tech., Associate Professor, Department of Precious Stones and Metals Processing, Institute of Engineering & Technology, NEFU	Physics, Astronomy and Engineering
Russia	Yakutia	Ivan Khristoforov, PhD, Senior Research Scientist, Laboratory of Permafrost Engineering, Melnikov Permafrost Institute, Siberian Branch of the Russian Academy of Sciences	Physics, Astronomy and Engineering
Russia	Yakutia	Vasilii Pavlov, Rector, Sakha Junior Sciecne Academy	Life sciences, environmental sciences and chemistry
Russia	Yakutia	Milana Petrova, Cand. Sc. Medicine, Associate Professor, Public Health and Health Care, General Hygiene and Bioethics Department, Medical Institute	Life sciences, environmental sciences and chemistry
Russia	Yakutia	Alexander Kononov, Cand. Sc. Biology, Deputy Director, NEFU Botanical Garden	Life sciences, environmental sciences and chemistry
Russia	Yakutia	Vasilii Mukhin, Senior Lecturer, Chemistry Department, NEFU Institute of Natural Sciences	Life sciences, environmental sciences and chemistry
Russia		Artem Oganov, Professor, Head, Skoltech Material Discovery Laboratory	Life sciences, environmental sciences and chemistry

YISF JUDGES

Russia	Yakutia	Lyudmila Zamorshchikova, Cand. Sc. Philology, Deputy Chair, Arctic Linguistic Ecology Lab, International Research Laboratory, Professor, French Philology Department, Institute of Modern Languages and International Studies, NEFU	Social sciences and humanities
Russia	Yakutia	Daryana Maximova, Cand. Sc. Politics, Associate Professor, Department of International Studies, Institute of Modern Languages and International Studies, NEFU, Deputy Executive Director, Northern Forum	Social sciences and humanities
Russia	Yakutia	Anna Mikhailova, Cand. Sc. Economics, Associate Professor, Department of Sociology and Human Resources Management, Institute of Finance and Economics, NEFU	Social sciences and humanities











L.V. Kirenskiy Amga Lyceum

Alisa Stanislavskaya,
Vladislav Uvarov,
Ayaal Lobanov,
Alexey Zakharov,
Team leaders:
Anna Zakharova, Alena Bystrova

Anabar Ulus Gymnasium

Aiyskhan Katanov, Erel Fedorov *Team leader:* Albina Baisheva

Batagay Secondary School Diana Sleptsova

Berdigestyakh Ulus Gymnasium

Anzhelina Ageeva Aysaar Nikolaev Dayana Yu Nadezhda Egorova Naryiaana Petrova Petr Egorov

Team leader: Ivan Diyakonov

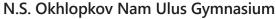
I.G. Timofeev Maya Lyceum
Aleksandr Ignatiev *Team leader:*Aytalina Ignatieva

V.P. Larionov Maya Secondary School

Kunnei Mamatkulova

Nikolay Smirnikov
Timur Krivogornitsyn
Team leader:
Aytalina Ignatieva
Ekaterina Tastygina

Arkadiy Tastygin
Aman Zhirkov
Damir Prokopiev
Darkhan Zhirkov
Diana Borisova



Ariana Gotovtseva Silvia Protopopova Uygulaana Vinokurova *Team leader:* Evdokia Sorokoumova

E.A. Varshavsky Information Technology Lyceum No. 24 Danil Zelensky











A.N. Chusovskoy Nyurba Technical Lyceum Konstantin Aleksandrov

Olekminsk Center for School Students Creative Development and Humanitarian Education Sargylana Nagly *Team leader:* Olga Rozhkova

A.V. Dmitriev Oy Secondary School Polina Parfenova

Oktemsk Science and Education Center
Konstantin Grigoriev-Kanaev
Lev Maksimov
Pavel-Ayastaan Antonov
Ernest Okhlopkov
Team leader:
Yulia Zakharova

S.K. Makarov Churapcha Gymnasium
Duolan Noev
Semen Platonov
Nurgun Vasiliev
Team leaders:
Maria Houtanova, Irina Solovieva

"Aiyy Kyhata" National Gymnasium Innokentiy Laptev Anton Alekseyev

Yakutsk City National Gymnasium Kirill Fedotov

International Arctic School
Irina Sleptsova
Erkin Nogovitsyn
Erchim Porokhonko
Yuvenalia Ivanova
Team leader:
Andrey Shkolnikov











Republican Boarding School

Aleksandr Monastyrev Sergey Ivanov Uruiana Sokolnikova

Sakha Polytechnic Lyceum

Alexey Davletov Anatoliy Kondratiev Denis Pavlov *Team leader:* Vera Gorbunova

Specialized Educational Scientific Center of the Ammosov North-Eastern Federal University

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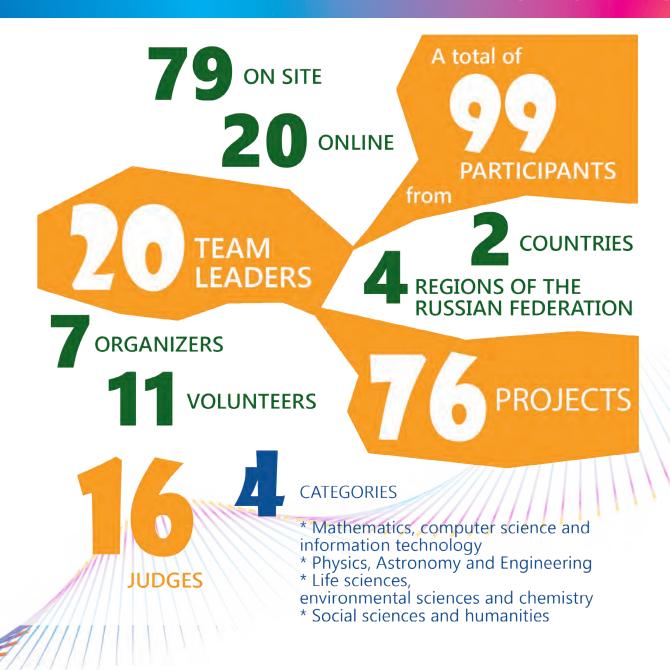
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DEAR PARTICIPANTS,

Welcome to the 2nd Yakutia International Science Games. For the last two years many competitions around the world have been cancelled or shifted online during the pandemic which has taught us that the science is important. This is the science competition and I hope that you will all be motivated by the interaction that you receive in this competition to continue to work hard in science and contribute to the future development around the world. I hope that you all will learn good science from each other. Finally, I wish the best of luck. Thank you! Maxtan!

Kwek Leong Chuan,

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