



INTERNATIONAL SCIENTIFIC FORUM FOR SCHOOLCHILDREN:

"SCIENCE EDUCATION, INNOVATION AND YOUTH - THE FOUNDATIONS OF SUSTAINABLE DEVELOPMENT"

The International Scientific Forum for Schoolchildren (ISF4Child) is held on the initiative of the Private Institution "International Centre of Scientific Collaborations" within the framework of the project "Children in Science", with the support of the Ministry of Science and Higher Education of the Republic of Kazakhstan, the Presidential Center of the Republic of Kazakhstan and the National Institute of Intellectual Property of the Ministry of Justice of the Republic of Kazakhstan (Qazpatent) within the IXth school "Young Inventor".

In honor of International Intellectual Property Day, the Day of Science Workers of Kazakhstan and the 125th anniversary of Academician Kanysh Satpayev.

**The Republic of Kazakhstan
Astana, April 11-13, 2024**

Venue: Presidential Centre of the Republic of Kazakhstan, 1A Alikhan Bokeykhan str. Astana, Kazakhstan
Office of the National Institute of Intellectual Property of the Ministry of Justice of the RK (Qazpatent), 57A, Mangelik El str., Astana, Kazakhstan

The organizers: Ministry of Science and Higher Education of the Republic of Kazakhstan (MSHE)
Ministry of Justice of the Republic of Kazakhstan Qazpatent

Private Institution "International Centre of Scientific Collaboration" (ICSC)
"One Belt and One Road" International Scientific and Educational Consortium (BRISEC)

Invited foreign guests: **Prof. Xiang-Ping Wu** - President of BRISEC, Academician of Chinese Academy of Sciences (China)

Prof. Manzoor Somro – Vice-President of BRISEC, Advisor to the Scientific Foundation of Economic Cooperation Countries, BTBU China, Member of the International Advisory Board of IAP SEP, Chairman of the Hindu Cultural Forum

Hatem Slimane – General director of I-FEST, President of ATAST (Tunisia)

11 April 2024 (Day One)

Presidential Centre

08:30-09:20 **Registration of participants**

Moderators: Evgeniy Demidenko

09:30-09:55 Greeting speeches

Nurbek Sayasat

Minister of Science and Higher Education of the Republic of Kazakhstan

Azamat Yeskaraev

Minister of Justice of the Republic of Kazakhstan

Kunsulu Zakaria

Advisor to the President of the Republic of Kazakhstan on Science and Innovations

Prof. Xiang-Ping Wu

President of BRISEC (online)

- 09:55-10:10** About the achievements and prospects of the Children in Science project for the sustainable development of scientific potential
Lyazzat Kusainova
President of ICSC, member of the Global Council for Science Education (IAP SEP), member of the Preparatory Committee of the World Organization for Scientific Literacy (WOSL), patent attorney of RK
- 10:10-10:15** **Moderators: Evgeniy Demidenko**
Presentation of the Scientific Forum participants - winners of international scientific competitions (offline and online participants)
- 10:15–10:25** Ceremonial presentation of letters of appreciation on behalf of the Minister of Science and Higher Education - **SAYASAT NURBEK**
- 10:25-10:35** Report: "Youth Science Education and Innovation for a Sustainable Future"
Manzoor Soomro
Vice President BRISEC
- 10:35-10:45** The role of youth in science
Muslim Khasenov
Ombudsman of Young Scientists of the National Academy of Sciences under the President of the Republic of Kazakhstan, PhD in Jurisprudence, Associate Professor at Maksut Nariqbayev University

PRESENTATIONS BY STUDENTS - WINNERS OF INTERNATIONAL SCIENCE, INNOVATION AND TECHNOLOGY COMPETITIONS

Moderators: Aysulu Bulasheva

- 10:45-10:55** Report with the presentation of the scientific project: «Software and hardware complex for analysis of agricultural soils with centralized control "Zheruyyk"»
Aruzhan Zhanibek
Gold medalist of International Creative Papers Conference&Olympic (ICPC), South Korea, Seoul; winner of the medal of the World Intellectual Property Association for Inventions (WIIPA) - 10th grade pupil of NISH, Kokshetau
- 10:55-11:05** Report with presentation of the scientific project: «Adverse effect of TikTok clip thinking system on teenagers»
Adiya Kuttygalieva
Winner - Gold medalist of the international competition "I-FEST" in Tunisia (2024) - 8th grade pupil of school-gymnasium #176, Almaty city

11:05-11:15	Report with presentation of scientific project: «Electrochemical method for obtaining a composite zinc coating comprising titanium dioxide». Awards: Special award of MIICA, Special award of IARC, Gold medal of ISIF-2023.	Togzhan Zhandarbek Azhar Nyshanbai <i>Winners - gold medalists of ISIF-2023 competition (IYSA, Indonesia), Awards: Special award of MIICA, Special award of IARC, Gold medal of ISIF-2023</i> <i>- 10th grade, lyceum №178, Almaty city.</i>
11:15-11:25	Report with presentation of the research project: Financial pyramid schemes and ways to prevent them"	Aisha Erden Tamiris Bakhytzhn <i>Bronze medalists of the international contest "I-FEST" in Tunisia (2024)</i> <i>- 11th grade pupils of Specialized Gymnasium No.12 of Almaty city</i>
11:25-11:40	Q&A. Discussion (15 minutes)	
11:40-12:00	Coffee Break (20 minutes)	
12:00-12:10	Report with presentation "Development of a Cross-Platform Framework for Programming Microcontrollers and Embedded Systems. Vertex 4 Polaris"	Matvey Rybalkin <i>Winner - gold medalist of the World Olympiad of Innovative Scientific Projects (WISPO-2022) (Indonesia, Bandung)</i> <i>- 11th grade pupil of school № 54, Almaty city</i>
12:10-12:20	Report with presentation: «A series of devices for non-contact disinfection of objects»	Ivan Gribenshchikov <i>Winner - gold medalist of the World Olympiad of Innovative Scientific Projects (WISPO-2022) (Indonesia, Bandung) - 9th grade student of KSU school-lyceum № 1 in Ridder</i>
12:20-12:30	Report with presentation of the «Application of Dijkstra's Algorithm in real life» scientific project	Halbai Diyar <i>Winner - Gold Medalist of International Science and Invention Fair 2023 (in the section of Mathematics) (Bali, Indonesia)</i> <i>- 10th grade pupil of Lyceum №10, Almaty.</i>
12:30-13:00	Q&A. Discussion (30 minutes)	
13:00-14:20	Lunch break	

DEVELOPMENT OF SCIENTIFIC, CREATIVE AND INVENTIVE SKILLS IN SCHOOLCHILDREN

Moderators: Evgeniy Demidenko

- 14:30-14:40** On the importance of developing science skills from an early age for the future of aerospace science
Dinmuhamed Muratov
Participant of Teenager Maker Camp and Teacher workshop-2019 (Nanning, China)
Student at Palm Beach State College, Florida, USA
- 14:40-14:50** A study of the SV Centauri double star system
Nuralim Abish, Ersultan Serikbay
Bronze medalists of the international scientific competition CASTIC-37 in China (2023)
- 11th grade students of Specialized Lyceum №92
- 14:50-15:00** Online presentation of the research project: "FINGUARD: Chitosan and lime based bio pesticide for environmental friendly pest control"
Luciana, Rabiatul, Fatima, Gandhisya, Chelsea, Alifa
Shafiyatul Amaliyyah Islamic School, in Medan city, Sumatera, Indonesia
(online video presentation)
- 15:00-15:10** «Teenager Maker Camp and Teacher workshop: - advantages and prospects."
Symbat Maademilova
"Teacher of the Year Kyrgyzstan-2023", physics teacher;
team leader of Teenager Maker Camp and Teacher workshop-2023 (Kyrgyzstan)
(online)
- 15:10-15:20** On skills learned at Teenager Maker Camp and Teacher workshop (China)
Aysulu Bulasheva
Participant of Teenager Maker Camp and Teacher workshop-2023
- 11th grade student of Astana school-lyceum №59
- 15:20-15:30** Involvement of schoolchildren in research work in Central Asia (based on the experience of a science camp for gifted children)
Saykal Bakirova
Participant of the Scientific Camp for gifted children (March 24-30, 2024), pupil of 10 "H" class, school-gymnasium №64 Bishkek (Kyrgyzstan)
- 15:30-16:00** **Q&A. Discussion (30 min.)**
- 16:00-17:00** **Ceremonial conclusion of the first day of the forum. Taking pictures**
- 18:00-20:00** Cultural program of the Scientific Forum participants for schoolchildren

(Presidential Center of the Republic of Kazakhstan)

12 April 2024 (Day Two)
Qazpatent office, 57A Mangelik El str., Astana

09:00-09:30	Registration	
09:30-09:40	Greeting speech	Yerbol Ospanov <i>Director of Qazpatent</i>
09:40-09:50	Introduction of coaches	Lyazzat Kussainova <i>President of the International Centre of Scientific Collaborations</i>
The training seminar for the participants of the Scientific Forum for schoolchildren was organized by the Karamay Youth Center for Science and Education		
10:00-10:30	Karamay Youth Center for Science and Education presents itself from four aspects: Philosophy of education, development positioning, development goals and curriculum development	Wang Yansen <i>The instructor Karamai Youth Center for Science and Education</i>
10:30-10:40	Preparation Work Before Training	
10:40-13:00	Participants of the training seminar will learn how to make bamboo dragonflies or palace lanterns by hand, which will demonstrate the application of scientific elements in traditional Chinese culture. Bamboo dragonflies were an ancient Chinese children's toy, as well as a prototype of modern helicopters.	Dong Qingming <i>Research area: Technical support and engineering technology</i>
13:00-14:30	Lunch break	
15:00 -18:00 Block 3 Atrium	Scientific tour: to Nazarbayev University (laboratories, master class with participation of schoolchildren)	
15:50-16:20 Block 7 and 9 Atrium	Tour of the laboratories of the School of Natural Social Sciences and Humanities	The pupils will be divided into 3 groups
16:30-17:30 Block 9 Atrium	Master classes at DC Lab and Fab Lab	The pupils will be divided into 4 groups
18:00	Closing of the program of the second day of the Scientific Forum for Schoolchildren	

13 April 2024 (Day three)

Qazpatent office

09:30-10:00	Registration	
10:00-11:25	«Making chopsticks»	
	<p>In this course, the participants of the training seminar will learn how to make traditional chopsticks. During the manufacturing process, the trainer will explain why chopsticks have a round tip at one end and a square tip at the other, as well as introduce some traditional Chinese etiquette rules related to chopsticks. Despite the fact that the sticks seem simple, making them is not an easy task. The wand making course will be conducted in accordance with traditional manufacturing processes, including material preparation, shaping, polishing, carving and beeswax application, which will allow everyone to experience the beauty of wood processing first-hand and feel the charm of Chinese traditional culture)</p>	<p>Liu Lingjing <i>Research area: creative production</i></p>
11:25-11:35	Coffee break	
11:35-13:00	«Sundial» <p>Time is crucial for humanity. Modern people rely on tools such as wristwatches and smartphones to find out the time and organize their schedules accordingly. However, in ancient China, a sundial was used to track time, determining it by the shadow cast by a gnomon on the dial of a sundial; this instrument was an outstanding invention in the field of astronomical timekeeping.</p> <p>In this course, we will talk about the sundial and introduce it to everyone who wants to, which will allow them to understand the principles of operation and their use.</p>	<p>Li Binh <i>Research area: Clean energy</i></p>
13:00-14:30	Lunch break	
14:30-15:30	Summarizing the results. Presentation of certificates Taking pictures	
16:00 -18:00	Scientific tour: to Nazarbayev University (laboratories, master class with participation of schoolchildren)	
16:00-17:30 1 block collection	Campus tour of the library, athletic center, sports center, atrium.	The pupils will be divided into groups

18:00

Completion of the program of the third day of the Scientific Forum for Schoolchildren. Collective photo taking

Departure of participants of the II-nd International Scientific Forum for Schoolchildren