

Ministry of Education and Science of the Russian Federation  
Society of Plant Physiologists of Russia  
M.K. Ammosov North-Eastern Federal University

## **P R O G R A M** (preliminary)



III<sup>rd</sup> scientific-practical conference  
"Prospects of phyto-biotechnology for improving the quality of  
life in the North" with international participation  
and a scientific school on cell biotechnology



4- 8 June, 2018  
Yakutsk, the Republic of Sakha (Yakutia), Russian Federation

ORGANIZERS:

M.K. Ammosov  
North-Eastern Federal  
University



Institute of Natural  
Sciences



Society of Plant  
Physiologists of Russia



## PROGPAM COMMITTEE

The CHAIRMAN:

**Evgenia Mikhailova** Rector of NEFU, Academician of RAE, Yakutsk  
PhD, DSc.

CO-CHAIRS:

**Konstantin Krivoschapkin** Head of Department - Vice Rector for Yakutsk  
Sciences and Innovation, PhD.

**Vladimir Kuznetsov** Corresponding Member of the Russian Moscow  
Academy of Sciences (RAS), Chairman of  
the Society of Plant Physiologists of  
Russia, DSc, Prof.

**Alexander Nosov** Head of the Department of Plant Moscow  
Physiology, Biological Faculty,  
Lomonosov Moscow State University  
(MSU), Head of the Department of Cell  
Biology and Biotechnology of Timiryazev  
Institute of Plant Physiology RAS (TIPPh  
RAS), DSc, Prof.

MEMBERS:

**Vasilii Savvinov** Vice-Rector of the NEFU for Strategic Yakutsk  
Development, PhD.

**Anatoly Nikolaev** Vice-Rector of the NEFU in the branch of Yakutsk  
natural math, director of the Institute of  
Natural Sciences (INS) NEFU, DSc.

**Alexey Bessmertny** Director of the Arctic Innovation Center Yakutsk  
NEFU

**Elena Lobakova** Professor of MSU, DSc. Moscow

**Choon-Hwan Lee** Professor, Department of Molecular Pusan, Republic  
Biology, Pusan National University of Korea  
(PNU), PhD.

**Ismayil Zulfugarov** Research Professor of Department of Pusan, Republic  
Molecular Biology PNU, PhD. of Korea

**Su In Cho** Professor, Head of Department of Herbal Pusan, Republic  
and Pharmacology, School of Korean of Korea  
Medicine, PNU, PhD

**Zhanna Okhlopkova** Associate Professor of INS NEFU, Yakutsk  
Scientific Adviser, Leading Researcher of  
Educational and scientific laboratory  
«Molecular genetics and cell technologies»  
(ESL «MG&CT») INS NEFU, PhD.

**Nadezhda Chirikova** Leading Researcher of INS NEFU, PhD. Yakutsk

**Sargylana Borisova** Deputy Director of the NEFU Botanical Yakutsk  
Garden, PhD.

**Natalia Ivanova** Deputy Director of the NEFU Botanical Yakutsk  
Garden, PhD.

## ORGANIZING COMMITTEE

The CHAIRMAN: Vice-Rector of the NEFU in the branch of Yakutsk  
**Anatoly Nikolaev** natural math, director of INS NEFU, DSc

DEPUTY:

**Vasily Kolodeznikov** Deputy Director of INS NEFU, PhD Yakutsk

**Zhanna Okhlopkova** Associate Professor of INS NEFU, Yakutsk  
Scientific Adviser, Leading Researcher of  
ESL «MG&CT» INS NEFU, PhD

ЧЛЕНЫ

**Maria Khandy** Researcher of ESL «MG&CT» INS NEFU, PhD Yakutsk

**Sargylana Alekseeva** Post-graduate student, Junior Researcher of Yakutsk  
ESL «MG&CT» INS NEFU

**Alexandra Andreeva** Post-graduate student of MSU Moscow

**Roman Grigoryev** Post-graduate student of TIPPh RAS Moscow

**Timur Kharitonov** Post-graduate student of TIPPh RAS Moscow

**Sardana Sivtseva** Junior Researcher of ESL «MG&CT» INS NEFU Yakutsk

**Elena Kucharova** Lead Engineer of ESL «MG&CT» INS NEFU Yakutsk

**Saiyyna Ivanova** Student of INS NEFU, group BO-14 Yakutsk

**Alena Semenova** Student of INS NEFU, group BO-14 Yakutsk

**Dariya Semenova** Student of INS NEFU, group BO-14 Yakutsk

**Uliana Egorova** Student of INS NEFU, group BO-15 Yakutsk

**Aina Vinokurova** Student of INS NEFU, group BO-15 Yakutsk

**Nana Kirillina** Graduate student of INS NEFU, group Yakutsk  
M-BO-17-2

**Akulina Alexandrova** Graduate student of INS NEFU, group Yakutsk  
M-BO-17-2

**Julustan Popov** Graduate student of INS NEFU, group Yakutsk  
M-BO-17-2

## CONTACTS OF THE COMMITTEE

**Zhanna Okhlopkova**

**Maria Khandy**

Tel.: 8(4112)49-68-24

Tel.: +7(924)-870-81-00

e-mail: biotechnologyysu@rambler.ru

e-mail: handy\_89@mail.ru

## LOCATION

Yakutsk, Republic of Sakha (Yakutia), Russian Federation, NEFU.

**Program**  
 III<sup>rd</sup> scientific-practical conference  
 "Prospects of phyto-biotechnology for improving the quality of life in the North"  
 with international participation  
 and a scientific school on cell biotechnology  
 (Yakutsk, NEFU, 4- 8 June, 2018)

**4 June (Monday)**

<b>Time</b>	<b>Event</b>	<b>Location</b>
3-4 June	Arrival, meeting, accommodation of invited scientists and participants	Hotels in Yakutsk, Campus NEFU
09:00-10:00	Registration	Hall on the 1str floor of «ULK» NEFU (Belinskogo Str., 58)
09:00-13:00	Exhibition of manufacturing companies and suppliers of laboratory and educational equipment in the field of molecular and cell biotechnology	Hall on the 1str floor of «ULK» NEFU (Belinskogo Str., 58)
10.00-10:55	<b>CONFERENCE OPENING</b>	Hall of the Academic Council of the NEFU, 1str floor of «ULK» NEFU (Belinskogo Str., 58)
<b>Plenary reports</b>		
11:00-11:40	<b>Vladimir Kuznetsov</b> (Russia, Moscow), Corresponding Member of RAS « <b>Physiological mechanisms of plant adaptation</b> »	Hall on the 1str floor of «ULK» NEFU (Belinskogo Str., 58)
11:40-12:20	<b>Alexandr Nosov</b> (Russia, Moscow), DSc, Professor « <b>Cell Technologies: Present and Prospects</b> »	
12:20-13:00	<b>Choon-Hwan Lee</b> (Republic of Korea, Pusan), PhD, Professor « <b>Molecular Biotechnology in Korea</b> »	
13:00-14:00	<i>Lunch break</i>	ULC Canteen
<b>Plenary reports</b>		
14:00-14:40	<b>Elena Lobakova</b> (Russia, Moscow) DSc, Professor « <b>Practical application of biotechnologies on the example of R&amp;D of the Department of Bioengineering of Lomonosov Moscow State University</b> »	Hall of the Academic Council of the NEFU, 1str floor of «ULK» NEFU (Belinskogo Str., 58)

14:40-15:20	<b>Ismayil Zulfugarov</b> , Research Professor (Republic of Korea, Pusan) « <b>Stress-adaptive potential of plants</b> »	Hall of the Academic Council of the NEFU, 1 <sup>st</sup> floor of «ULK» NEFU (Belinskogo Str., 58)
15:20-16:00	<b>Nadezhda Chirikova</b> (Russia, Yakutsk), Leading Researcher, PhD « <b>Phytochemical research of Yakutia wild plants</b> »	
16:00-16:20	<i>Coffee break</i>	
16:20-17:00	<b>Su In Cho</b> (Republic of Korea, Pusan), Professor, PhD. « <b>Innovations in the plant studies</b> »	
17:00-17:40	<b>Zhanna Okhlopkova</b> (Russia, Yakutsk), Leading Researcher of ESL «MG&CT» INS NEFU, PhD. « <b>Prospects for biotechnology in the North</b> »	
19:00	<b>WELCOME PARTY</b>	<b>Banquet hall «KFEN»</b>

### 5 June (Tuesday)

Time	Event	Location
<b>Sectional meetings</b>		
10:00-11:30	<b>Section 1. Plant Biotechnology</b> Oral reports of SPC participants	Lecture room 263 «KFEN» (Kulakovskogo Str., 48)
11.30-11.45	<i>Coffee break</i>	
11:30-13:00	<b>Section 1. Plant Biotechnology</b> Oral reports of SPC participants	Lecture room 263 «KFEN» (Kulakovskogo Str., 48)
13:00-14:00	<i>Lunch break</i>	
<b>Scientific School on Cell Biotechnology</b>		
14:00-15:30	Act lecture « <b>Plant cell culture</b> » Lecturer: DSc, Professor <b>Alexander Nosov</b>	Lecture room 263 «KFEN» (Kulakovskogo Str., 48)
15:30-16:00	<i>Coffee break, transfer to another building</i>	
16:00-17.30	Practice « <b>Plant cell culture</b> » Lecturer: DSc, Professor <b>Alexander Nosov</b>	Lab. 502 ESL «MG&CT» (the Arctic Innovation Center NEFU, Kulakovskogo Str., 46)
14:00-17:30	Excursion for the delegation of scientists to the Melnikov Institute of Permafrost on the behalf of SB RAS. Accompanying: conference organizers	Merzlotnaya Str., 36
18:00	Excursion for the delegation of scientists to Comdragmetall of RS(Y). Accompanying: conference organizers	Kirova Str., 12

### 6 June (Wednesday)

Time	Event	Location
<b>Sectional meetings</b>		
10:00-11:30	<b>Section 2. Plant resources and their potential</b> Oral reports of SPC participants	Lecture room 263 «KFEN» (48 Kulakovskogo str.)
11:30-11:45	<i>Coffee break</i>	
11:30-13:00	<b>Section 2. Plant resources and their potential</b> Oral reports of SPC participants	Lecture room 263 «KFEN» (48 Kulakovskogo str.)
13:00-14:00	<i>Lunch break</i>	
<b>Scientific School on Cell Biotechnology</b>		
14:00-15:30	Act lecture « <b>Biotechnology of cyanobacteria</b> » Lecturer: DSc, Professor <b>Elena Lobakova</b>	Lecture room 263 «KFEN» (48 Kulakovskogo str.)
15:30-16:00	<i>Coffee break, переход в другой корпус</i>	
16:00-17:30	Practice « <b>Biotechnology of cyanobacteria</b> » Lecturer: DSc, Professor <b>Elena Lobakova</b>	Lecture room 263 «KFEN» (48 Kulakovskogo str.)
14:00-17:30	Excursion for the scientists delegation to the Medical clinic of NEFU, laboratories of the Arctic Innovation Center NEFU Accompanying: conference organizers and members of the program committee	36 Kulakovskogo str. 46 Kulakovskogo str.
18:00	Excursion for the scientists delegation to the ethnographic complex «Chochur Muran» Accompanying: conference organizers	Chochur-Muran, 7 km Vilyuysky tract

### 7 June (Thursday)

Time	Event	Location
<b>Scientific School on Cell Biotechnology</b>		
10:00-11:30	Act lecture « <b>Anti-cancer potential of plants</b> ». Lecturer: Professor, PhD <b>Su In Cho</b>	Lecture room 263 «KFEN» (48 Kulakovskogo str.)
11:30-11:45	<i>Кофе-брейк</i>	
11:45-13:00	Act lecture « <b>Molecular biotechnology of plants</b> ». Lecturer: Professor, PhD <b>Ismayil Zulfugarov</b>	Lecture room 263 «KFEN» (48 Kulakovskogo str.)
13:00-14:00	<i>Lunch break</i>	
<b>Scientific School on Cell Biotechnology</b>		
14:00-15:30	Act lecture of sponsor representatives of the event on the possibilities of modern cell and molecular technologies	Lecture room 263 «KFEN» (48 Kulakovskogo str.)
15:30-16:00	<i>Кофе-брейк</i>	
16:00-17:30	Master Class « <b>Molecular biotechnology of plants</b> ». Lecturer: Professor, PhD <b>Ismayil Zulfugarov</b>	Lab. 242 ESL «MG&CT» («KFEN», 48 Kulakovskogo str.)

14:00-17:30	Excursion for the delegation of scientists to the Yakutian Botanical Garden Accompanying: conference organizers	10 km Sergelyakhskoye highway
18:00	Excursion for the delegation of scientists to the Mammoth Museum Accompanying: conference organizers	«KFEN», 48 Kulakovskogo str.

### 8 June (Friday)

Time	Event	Location
<b>Scientific School on Cell Biotechnology</b>		
10:00-11:30	Act lecture « <b>Plant secondary metabolism</b> » Lecturer: PhD <b>Dmitry Kochkin</b>	Lecture room 263 «KFEN» (48 Kulakovskogo str.)
11:30-11:45	<i>Coffee break</i>	
11:45-13:00	Practice « <b>Plant secondary metabolism</b> » Ведущий: PhD <b>Dmitry Kochkin</b>	Lab. 502 ESL «MG&CT» (the Arctic Innovation Center NEFU, 46 Kulakovskogo str.)
10:00-13:00	Program for invited scientists: meeting with the Rector of the NEFU <b>Eugenia Mikhailova</b>	«ULK» 58 Belinskogo str.
13:00-14:00	<i>Lunch break</i>	
14:00-15:30	Meeting of the Program Committee, consideration and approval of the resolution of the event, preparation of documents, signing of contracts	Lab. 281 ESL «MG&CT» («KFEN», 48 Kulakovskogo str.)
16:00-17:00	CONFERENCE CLOSING	Lecture room 263 «KFEN» (48 Kulakovskogo str.)
18:00-21:00	Gala dinner « CONFERENCE CLOSING »	«Makhtal» - restaurant of the Yakut cuisine (2 Kirova str.,)

### 9 June (Saturday)

Time	Event
04.00-18.00	Departure of invited scientists and conference participants



### Speakers of the scientific school:

№	Section of the scientific school	Lecturer
1	«Plant cell culture», Lecture & Practice	Head of the Department of Plant Physiology, Biological Faculty MSU, Head of the Department of Cell Biology and Biotechnology of TIPPh RAS, DSc, <b>Professor Alexander Nosov</b>
2	«Biotechnology of cyanobacteria», Lecture & Practice	Professor of MSU, <b>DSc Elena Lobakova</b>
3	«Plant secondary metabolism», Lecture & Practice	Senior Researcher of the Department of Plant Physiology, Biological Faculty MSU, <b>PhD Dmitry Kochkin</b>
4	«Anti-cancer potential of plants», Lecture	Professor, Head of Department of Herbal and Pharmacology, School of Korean Medicine, PNU, <b>PhD Su In Cho</b>
5	«Molecular biotechnology of plants», Lecture & Mastrer Class	Research Professor of Department of Molecular Biology PNU, <b>PhD Ismayil Zulfugarov</b>

## **Brief description of the cultural attractions of Yakutia**

### **Museum of Precious Metals or Treasury Republic of Sakha (Yakutia)**

Address: Republic of Sakha (Yakutia), Yakutsk, Kirova str., 12, 123.

The treasury of the Republic of Sakha Yakutia is an integral part of the State's Fund for Precious Metals and Precious Stones of the Republic of Sakha (Yakutia). A part of Treasury values is exhibited for public display at the always open exhibition "Treasury of the Republic of Sakha (Yakutia)".

The exhibition "Treasury of the Republic of Sakha (Yakutia)" provides an opportunity to get acquainted with the unique collection of nuggets of gold, platinum, silver, large natural diamonds, a fine collection of works by Yakut masters - jewelers, cutters, bone and stone carvers.

The exhibition "Treasury of the Republic of Sakha (Yakutia)" and the preservation of exhibits is carried out by the state institution "State Depository of the Sakha Republic (Yakutia)."

### **Ethnographic complex «Chochur Muran»**

Address: Republic of Sakha (Yakutia), Yakutsk, Vilyuysky tract, 7 km, 5.

Ecological and ethnographic complex "Chochur-Muran" was created as some sort of a tribute to the first Russian researchers of the Trans-Urals. The complex was opened in 2005 and is located beyond the city borders of Yakutsk, at the foot of the hill. It represents an area with several restored wooden buildings of different purposes. There are a lot of interesting things: for example, a merchant's house with a completely original interior and a beautifully carved window frames or barn, built according to the prototype of the barn of the same merchant (unluckily, the original building was not subject to restoration). The barn is also preserved original interior, and it, like other buildings on the territory of the complex, is now serves as a hotel with all amenities. Also interesting is the cottage of the rider (rider of sled dogs) and the magnificent house of the hunter - magnificent not in terms of size or splendor, but in the sense of the abundance of trophies that can be seen here.

### **The Mammoth Museum**

Address: Republic of Sakha (Yakutia), Yakutsk, Kulakovsky str., 48, KFEN.

The establishment of the World Mammoth Museum in 1991 as a scientific and cultural center for the study of the mammoth fauna and its habitat and the promotion of scientific knowledge was initiated by the first Yakut paleontologist Petr Alekseyevich Lazarev. In 1995, in order to strengthen the scientific research, the Museum became a part of the Academy of Sciences of the Republic of Sakha (Yakutia), and was renamed to the Mammoth Museum. In July 1998, according to the Ordinance of the Presidium of the Academy of Sciences of the Republic of Sakha (Yakutia), the Museum was attached to the Institute of Applied Ecology of the North of the Academy of Sciences of the Republic of Sakha (Yakutia) as a structural unit. In 2011, the Mammoth Museum, as part of the Institute, also became a part of M.K. Ammosov North-Eastern Federal University.

On September 14, 2012, by the Order of NEFU Rector E.I. Mikhailova, the Mammoth Museum Laboratory was named after its founder, Candidate of Biological Sciences, the winner of Prize of the Republic of Sakha (Yakutia) in the field of Science and Technology, Honored Scientist of the Republic of Sakha (Yakutia), Honored Veteran of the SB of RAS, Lazarev Petr Alekseyevich.