

**FORUM**

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# Ecobaltica



**YOUTH-ENVIRONMENTAL-SCIENCE-INNOVATIONS**

**25 years**  
**ANNIVERSARY**



Linnæus University



## Scientific Program

### XVIII-th Youth International Scientific and Environmental Forum of Baltic region countries “**ECOBALTICA**”

15-16 Dec. 2021

St.-Petersburg, Moscow region, Russia

"All-Russian research Institute of Phytopathology",  
University of Linnaeus (Sweden),

"Association of international youth cooperation and  
tourism"

Global Alumni Alliance,

the Association of graduates of St. Petersburg universities in  
Poland

[www.ecobaltica.org](http://www.ecobaltica.org)

**15.12.2021**

<b>No</b>	<b>Time</b>	<b>Name of speaker</b>	<b>Name of report</b>
<b><i>St. Petersburg, Russia</i></b>			
<b>10.00-10.30</b>	<p align="center"><b><i>Room 1</i></b>  <b><i>Zoom</i></b>  <a href="https://us02web.zoom.us/j/89396038935?pwd=ZTlEa0g1cHdzeUorb1ZvL1B0ZENxdz09">https://us02web.zoom.us/j/89396038935?pwd=ZTlEa0g1cHdzeUorb1ZvL1B0ZENxdz09</a>  <b><i>Идентификатор конференции: 893 9603 8935</i></b>  <b><i>Код доступа: 152000</i></b>  <b><i>REGISTRATION in zoom starting at 09.25 a.m.</i></b>  <b><i>Opening Ceremony</i></b>  <b><i>( Moderator the Chair of the Program Committee, Prof. Vasily Rud' )</i></b></p>		
<p align="center"><b><i>Speakers:</i></b>  <b><i>Prof. Viktor Startsev (Deputy Director FSBSI ARRIP, Russia)</i></b>  <b><i>William Hogland (Professor, International Director Forum ECOBALTICA, Sweden)</i></b>  <b><i>Vladimir Kosolapov (Academician of Russian Academy of Sciences (RAS),</i></b>  <b><i>Director Federal Scientific Center for Feed Production and</i></b>  <ul style="list-style-type: none"> <li><b><i>• Agroecology named after V.R. Williams, , Russia)</i></b></li> </ul> <b><i>Vladimir Chetiy ( Professor, Russia)</i></b>  <b><i>Artem Markaryan ( Prof., RCNK DANMARK)</i></b></p>			
<b>Moscow Time 10.30-17.00</b>	<p align="center"><b><i>Room 1</i></b>  <b><i>Plenary Section ( Moderator -</i></b>  <b><i>Vasily Rud' (Russia) and</i></b>  <b><i>William Hogland (Professor, International Director Forum</i></b>  <b><i>ECOBALTICA, Sweden)</i></b></p> <p align="center">Each presentation with questions- 30 min.</p>		
<p align="center">P-112 Prof. William Hogland (Linneaus University)  Phytoremediation by the Environmental Science and Engineering Group  at Linnaeus University, Sweden</p> <p align="center">P-121 Prof. A. Andreev, D. Ivanov, A. Grinin ( Moscow State University)  "Overcoming the Limits". The first results of an interdisciplinary scientific project</p> <p align="center">P-120 Professor Marcia Marques Gomes  (Rio de Janeiro State University)  The performance of a Multi-Stage Hybrid Reactor to treat real wastewater: Benzophenone and  Diethyl Phthalate removal</p> <p align="center">P-111 Prof. Jacek Makinia, Ewa Zaborowska, Mojtaba Maktabifa (Gdansk University of Technology)  Carbon footprint of wastewater treatment processes</p> <p align="center">P-46 Robert Miśkiewicz, Jan Łubiński, Bartosz Kostarczyk (3 LO w Gdynii Poland) ExtremeBox</p> <p align="center">P-15 Prof. Bankina at all (Latvia University of Life Sciences and Technologies) Development of  wheat tan spot depending on soil tillage system</p> <p align="center">P-92 Valery Kalinitchenko at all (Russian Phytopathology Research Institute) Biogeosystem Tech-  nique  for environmentally safe technological development</p> <p align="center"><b>Room 1</b>  <b>14.30-15.00</b></p> <p align="center"><b>videopresentation</b>  Section 1  №53 Sofia Zhelezova      Victoria Kolupaeva Eugenia Stepanova  Phytotoxicity and residual aftereffect of Magnum herbicide (metsulfuron-methyl) on potato in  bioassay test</p>			

	<p><i>№93 Victor Chaplygin, Anatoly Barakhov, Valery Kalinitchenko, Tatiana Minkina</i>  <i>Enhancement the efficiency of rabbit farms through alternative waste management options</i></p> <p><b>Room 1</b>  <b>Plenary section</b>  <b>16.00-17.00</b></p> <p>Prof. V. Krasnoshchekov ( St.Petersburg polytechnic University) Formation of engineering research competencies of foreign pre-masters' students: the best practices  <i>P-110 INGA GRINFELDE (Latvia University of Life Sciences and Technologies)</i>  <i>THE HISTORY AND DEVELOPMENT PERSPECTIVES OF CONCEPTUAL HYDROLOGICAL MODEL METQ</i></p> <p>P-19 Andrey Yurkov ( All-Russia Research Institute for Agricultural Microbiology)  The biodiversity of arbuscular mycorrhizal fungi and prospects for ones using as biopreparations to enhance plant growth</p>
<p><b>17.00-20.00</b></p>	<p><i>Room 1</i></p> <p><i>Oral Section №1</i></p>
	<p><b>Oral Section №1</b></p> <p><i>№100 Eldar Abdeev, Valery Meshalkin, Rail Saitov, Rinat Abdeev and Minnehan Fatykhov</i>  <i>Energy-efficient process for low-temperature recycling of oil sludge waste</i></p> <p><i>№24 Konstantin Lelekin, Alexei Cheremisin, Maria Andrianova</i> <i>Dependence of color and OD254 of water from pollution by domestic wastewaters</i></p> <p><i>№29 Svetlana Hamitova Aleksandra Popova Marina Ivanova at al.</i>  <b>ECOLOGICAL AND CHEMICAL ASSESSMENT OF THE STATE WATER OBJECT IN THE NORTH-WESTERN PART OF THE VOLOGDA REGION</b></p> <p><i>№32 Petr Mukovoz</i>  <i>Sesame oil as an effective, environmentally friendly synergist for insecticidal compositions based on neonicotinoids, pyrethroids and organophosphorus compounds.</i></p> <p><i>№33 Victoria Kolupaeva Victor Gorbatov</i>  <i>Risk Assessment of Selected Pesticides for Earthworms</i></p> <p><i>№50 Alexey Glinushkin Vitaly Javakhia Rishat Mukhammadiev</i>  <i>Rinat Mukhammadiev Lenar Valiullin</i></p> <p><i>Antagonists of pathogens of hazardous types of diseases of agricultural plants, promising for creation of effective and environmentally friendly preparations for reducing toxicity of grains and feeds contaminated with fusariotoxins</i></p> <p><i>№56 Liudmila Molodkina Anna Suckareva</i>  <i>Comparative spectral analysis of water sources and snow cover in Gatchina</i></p> <p><i>№77 Vladimir Cherniavskih Елена Думачева Дмитрий Думачев</i>  <i>resource potential of Urtica of the Cretaceous south of the Central Russian Upland</i></p> <p><i>№60 Svetlana Ulbasheva Natalia Statsyuk</i>  <i>Stimulation of a wheat grain germination via the pre-sowing treatment with low-frequency pulse electric field</i></p> <p><i>№65 Maria Yakusheva Roman Davydov</i>  <i>Methodology for assessing the impact on soil pollution in urban rural areas of central Russia</i></p>

	<p style="text-align: center;">№67 <span style="float: right;">Lenar Valiullin at al.</span>  <i>Evaluation in vivo of the mutagenic activity of a biological preparation based on lactic acid and propionic acid microorganisms</i></p> <p style="text-align: center;">№70 <span style="float: right;">Ksenia Pishchaeva      Anna Makarova    Elena Nikulina at al.</span>  <i>Research of phytoextraction of mercury from contaminated soils</i></p> <p style="text-align: center;">№72 <span style="float: right;">Elina Nepomnyashchaya   Aleksandr Makarychev</span>  <i>Development of combined optical sensor for analyzing the composition of aqueous media</i></p> <p style="text-align: center;">№74 <span style="float: right;">Vladimir Cherniavskih</span>  <i>Prospects of ecological breeding of perennial legumes for the northern regions of Russia</i></p> <p style="text-align: center;">№79 <span style="float: right;">Anna Simonenkova Ekaterina Demina at al.</span>  <b>APPLICATION OF BIOELECTRIC POTENTIAL USED IN ANIMAL HUSBANDRY PRACTICE TO ASSESS THE TECHNOLOGICAL CHARACTERISTICS OF MILK</b></p> <p style="text-align: center;">№81 <span style="float: right;">Dmitry Shurupov</span>  <i>Assessment of the level of soil pollution of agricultural lands Kotlin Island</i></p> <p style="text-align: center;">№90 <span style="float: right;">Tatiana Kovaleva, Valentin Vershinin, Alexey Glinushkin, Ivan Savchenko and Alexander Kovalev</span>  <i>Creation of protective forest stands as the basis for the formation of an "eco skeleton" of sustainable agricultural landscapes</i></p> <p style="text-align: center;">№95 <span style="float: right;">Rodion Dobretsov</span>  <i>Creation of a device for detecting fluorescence from microfluidic chips for studying biosystems</i></p>
<p style="text-align: center;"><b>17.00- 20.00</b></p>	<p style="text-align: center;"><b>Room 2</b>  <b>Zoom</b>  <a href="https://us02web.zoom.us/j/81345864928?pwd=MnRuSmJETEwzNVRzSzc1V08yTE5xOT09">https://us02web.zoom.us/j/81345864928?pwd=MnRuSmJETEwzNVRzSzc1V08yTE5xOT09</a>  Идентификатор конференции: 813 4586 4928  Код доступа: 213097</p> <p style="text-align: center;"><b>Section 4</b></p> <p style="text-align: center;">№20 <span style="float: right;">Julia Bazarnova    Ekaterina Aronova Zhanna Repinskaia</span>  <b>ON STAFF TRAINING IN SPECIALTY «INDUSTRIAL ECOLOGY AND BIOTECHONOLOGY» AT PETER THE GREAT SAINT PETERSBURG POLYTECHNIC UNIVERSITY</b></p> <p style="text-align: center;">№23 <span style="float: right;">Alexander Chernikov</span>  <i>Problems and peculiarities of preparing foreign nationals for graduate and postgraduate studies</i></p> <p style="text-align: center;">№26 <span style="float: right;">Nina Shakhova    Eugenia Sherina Galina Kashkan</span>  <b>COORDINATING SUPPORT OF THE FOREIGN RESEARCHERS' SCIENTIFIC INITIATIVE AS A FACTOR OF NEW GENERATION OF YOUNG SCIENTISTS' FORMATION</b></p> <p style="text-align: center;">№62 <span style="float: right;">Svetlana Kalikina      Ekaterina Belyaevskaya    at al.</span>  <i>Students Project Marathon as new format of practice-oriented education</i></p> <p style="text-align: center;">№82 <span style="float: right;">Olga Novikova    Dzhaved Basek Victor Krasnoshchekov Aleks Krasnov at al.</span>  <i>Analysis of problems of pre-master's study in economic areas at a technical university</i></p>

*Videopresentations Section 4*

№5 *Viktoria Gorbenko Tatiana Burmistrova Daria Dolbilova at al.*

*Assessment of the level of readiness of foreign Bachelors of Economics of the fourth year to write a Final Qualifying Paper*

№9 *Gritz Nadezhda Xaritonov Sergei Zueva Julia*

*Development and implementation aspects of international Master's degree programs in agriculture*

№27 *Elena Ionkina Natalia Kharlamova*

**MODEL FOR FORMING PROFESSIONAL AND LANGUAGE COMPETENCE FOR A FOREIGN PRE-MASTER**

№38 *Olga Ilyina Yulia Naumenko Marina Zolotareva*  
*The Principles of Designing the Program of Teaching the Russian Language as a Foreign One for Future Masters' of Engineering Specialties*

№40 *Andrey Novikov Tamara Blinova*  
**PRE-MASTER'S TRAINING OF FOREIGN STUDENTS AS A FACTOR IN IMPROVING THE QUALITY OF TRAINING OF FUTURE MASTERS**

№44 *Elena Pinevich Olga Solianik*  
*New program of the course "Russian as a foreign language" for pre-graduate students in the digital environment: development and prospects*

**18.00-  
18.40**

**Room 3**  
**Section videoreports**

**Zoom**

<https://us05web.zoom.us/j/89149583350?pwd=Vk5XWG9lMC95ZmJaZ0FuZlhsU3RHQT09>

*Идентификатор конференции: 891 4958 3350*

*Код доступа: eS9CD6*

*Section 1*

№14 *Nikolay Belyakov Nadezhda Nikolina*  
*Climate change as an agricultural problem in the Middle East*

№28 *Liudmila Kulagina Tatiana Kulagina Irina Kirillova*  
*Enhancement the efficiency of rabbit farms through alternative waste management options*

№47 *Lenar Valiullin*  
*Study of the biological properties of new chemical compounds of the pyrimidine series*

№52 *Vladimir Mukovoz Veronica Andreevskaya*  
*Biologically active compositions based on natural antimycotics are effective means of combating mycoses.*

№58 *Irena Gureeva*  
*Development of energy-efficient LED phytolamps and techniques for lighting agricultural crops*

№61 *Petr Mukovoz Olga Torzhkova*

*Environmentally friendly compositions from extracts of Dalmatian chamomile and rustic tobacco - effective natural insecticides.*

№63 *Maria Yakusheva Roman Davydov*  
*Study of the impact on the environment and agricultural lands of reclaimed dumps of a granite stone quarry in the Leningrad region*

18.50-  
19.30

## *Zoom*

<https://us05web.zoom.us/j/87335480226?pwd=SiU5eXdKeXZtWCttTB5VmlOUmplQT09>

*Идентификатор конференции: 873 3548 0226*

*Код доступа: FhT3m3*

№68 Vladimir Klimenko Svetlana Malyarenko  
*Eco-friendly methods of harvesting fermented feed from herbs*

№73 Ekaterina Savchenko Elina Nepomnyashchaya  
*Application of the speckle correlation sensor in veterinary medicine*

№76 Vladimir Cherniavskih Михаил Маринич Елена Думачева  
*Some results of ecological breeding of cereal lawn grasses*

### *Section 2*

№11 Marianna Kremenevskaya *at al.*

*Recycling leather bio-raw materials*

### *Section 3*

№36 Perelade Jombo Nikita Kostik Alexander Bobyl  
*Influence of the coastal wind currents on the renewable energy potential of Nigeria.*

10.00-  
17.00

**16 Dec. 2021**

**Room 1**

*Zoom*

<https://us02web.zoom.us/j/83677180682?pwd=NXdlZ0lsMHlSai9xVGZxM3JFc29rdz09>

*Идентификатор конференции: 836 7718 0682*

*Код доступа: 783281*

**Academics Plenary Section ( mostly in Russian language only for this Plenary section)**  
**( Moderator - Alexey Glinushkin (Corresponding Member of RAS, Russia)**  
**And Vasily Rud' (Russia)**

*Corr. Member of RAS A. Glinushkin*

№87 Academician V. Kosolapov ( Federal Williams Research Center  
of Forage Production & Agroecology) **Scientific support of breeding of fodder crops in Russia**

Academician Meshalkin **DIGITALIZED ENGINEERING FUNDAMENTAL  
FOUNDATIONS, METHODS AND TOOLS OF ENERGY RESOURCE  
EFFECTIVE ENVIRONMENTALLY SAFE PRODUCTIONS OF  
A PETROLEUM AND GAS CHEMICAL COMPLEX**

Academician Zhuchenko (Federal Research Center for Bast Fiber Crops,  
All-Russian Horticultural Institute for Breeding, Agrotechnology and Nursery)  
**FOOD SAFETY FOR SUSTAINABLE DEVELOPMENT AND GLOBAL HEALTH**

Academician Sinegovskaya (All-Russian Research Institute of soy Increase of protein  
concentration in soybean seeds for the needs of food security of the Russian Federation

	<p><i>Academician Aseeva T.V. ( Far Eastern Research Institute of Agriculture) Effects of phytopathogens on the yield and quality of grain seeds in monsoon climate</i></p> <p><i>P-122 Prof. Sinegovskiy (All-Russian Research Institute of soy) Increasing the economic efficiency of soybean production depending on varietal characteristics</i></p> <p><i>Corr. Member of RAS A. Korshunov The state and prospects of potato growing in Russia</i></p> <p><i>№69 Sergey Chulkin Improving the reliability and environmental friendliness of marine diesel engines Hydroelectric power stations on the Beaver River</i></p> <p><i>Franciszek Switala Hydroelectric power stations on the Beaver River</i></p>
<p><b>14.00- 14.30 break</b></p>	<p><i>break</i></p>
<p><b>14.30- 15.00</b></p>	<p style="text-align: center;"><b>Room 1</b> <b>Oral Presentations</b></p> <p><i>Section 2</i></p> <p><i>№4 Hayder Shakir Elena Lonkina Natalia Kharlamova</i></p> <p style="text-align: center;"><b>CONVERSION OF PLASTIC WASTE INTO INSULATION MATERIALS</b></p> <p><i>Section 3</i></p> <p><i>№30 Nikita Kostik Sergey Tarasov Alexander Bobyl Eugeny Terukov</i></p> <p><i>Potential of wind generators as additional source of energy in hybrid renewable energy systems located in Baltic region</i></p>
<p><b>17.00- 18.00</b></p>	<p style="text-align: center;"><b>Room 1</b></p> <p><i>Posters</i></p> <p><i>Section 1</i></p> <p><i>№2 Alexander Smirnov Natalia Semenova at al UV-A, UV-B, and UV-C Irradiation Influence on Productivity and Anthocyanins Accumulation in Lettuce, Red Mustard and Sweet Basil Plants.</i></p> <p><i>№3 Kseniya Arinushkina Technologies to reduce and control greenhouse gas emissions</i></p> <p><i>№6 Дмитрий Исаенко Сергей Родин Multifunctional complex of environmental monitoring with optical communication channel</i></p>

№7 Alina Mironkina Sergei Kharitonov  
*Managing the process of creating and using artificial intelligence to monitor diseases of agricultural plants*

№35 Ekaterina Isupova  
*Features of monitoring the radioactive situation in the surface air layer and atmospheric precipitation in settlements and agricultural fields located at distances closer than 150 km from the nuclear power plant*

№13 Sergey Makeev  
*Assessment to ecological state of water objects in agricultural zones of Leningrad region a Russian Federation*

№37 Diana Dmitrieva  
*Development a migration-dosimetric model of irradiation formation to herbaceous plants for constant radioactivity emissions*

№39 Ekaterina Gryaznova  
*Determination of the potato quality under various influences on tubers*

№41 Anna Mozhayko Mikhail Staritsyn  
*Spectral sensor for high-temperature measurements in industrial production of agricultural products*

№42 Mariia Mazing Anna Zaitceva  
*Medical system for monitoring the health status of the rural population*

№49 Nadezda Danilova Svetlana Zubareva  
*SOIL CADASTRAL VALUE OF AGRICULTURAL LANDS IN THE NORTH-WESTERN FEDERAL DISTRICT*

№51 Alina Mukhammadieva Minsagit Lutfullin at al.  
*Study of the acute toxicity of new anthelmintic compound "K-55" in rats*

№54 Roman Dmitriev Anna Grevtseva  
*Restoration of the density of surface soul contamination by radionuclides according to aerogamma survey data*

№55 Svetlana Shchepetkina  
*Organization of an Antimicrobial Control System in industrial animal husbandry in order to provide fertilizers for crop products without residual amounts of pharmacologically active substances*

№64 Maria Yakusheva Roman Davydov  
*Monitoring of soil pollution under the influence of industrial enterprises in one of the districts of St. Petersburg*

№66 Nadezhda Potievskaya Denis Alexeev at al.  
*Green spaces estimation in St. Petersburg using remote sensing data*

№71 Aleksandra Kurkova Victoria Naumova  
*Reliability of the results of measurements of air pollution by solid particles by the method of detection of scattered laser radiation*

№78 Mikhail Romanov Franciszek Switala  
*Solution of the problem of water conservation in arid and semi-arid zones*

*ed on the preservation of the diversity of natural ecosystems (for China as an example)*

№80 Anton Valov  
*Portable Fourier spectrometer for rapid analysis of chemicals used in agriculture*

№83 Gregory Pchelkin  
*Monitoring the water quality in our rivers in urban areas.*

№84 Daria Ryzhova  
*Environmental monitoring of the state of water objects using radar systems*

№89 Anatoliy Barakhov

*INFLUENCE OF SORBENTS (MINERAL AND CARBONACEOUS)  
IN THE PHYTOTOXICITY OF SOILS COMBINED BY COPPER AND BENZO  
NE CONTAMINATION UNDER  
CONDITIONS OF A MODEL LABORATORY EXPERIMENT* ,

#57 Danila Savin  
*Assessment of annual emissions of 14C isotopes at nuclear  
power plants and their impact on the radiation dose of the population and plants*  
#48 Zahid Mamedov and Azer Agarzayev  
*Green Economy in Azerbaijan as the Main Direction of Greening*

#96 Victor Kuganov, Elena Pavlova and Mikhail Lobanov  
*EVALUATION OF THE ECONOMIC EFFICIENCY OF THE REUSE  
OF MINERAL WOOL AS A REDUCTION OF THE HARMFUL  
ENVIRONMENTAL IMPACT OF GREENHOUSE PRODUCTION  
WASTE BASED ON HYDROPONIC TECHNOLOGIES*

№123 Alexey Andreev at al. *Development of digital technologies for  
decarbonization as a driver of overcoming  
global development problems*

№124 Maria Varenik and Petr Melnik  
*Youth and youth policy for sustainable developmen*

№125 Inga Grinfelde (Latvia University of Life Sciences and Technologies)  
*Distribution of long-term and short-term air pollution of chemical  
elements in Jelgava city, Latvia*

*Section 2*

№34 Dmitry Patokin and Alexander Danilov  
*Energy-efficient recovery of chemical industry waste containing nitrocellulose*

*Section 3*

№31 Nikita Kostik Alexander Bobyl Evgeniy Terukov at al.  
*Assessment of the agriphotovoltaic potential in the Chuvash  
region using artificial neural network*

№131 Farid Bayramov , Vladimir Fedorov , Vladimir Toporov at al Andrei Mizerov  
*Growth and Raman Characterization of Epitaxial GaN layers synthesized on Si (111) by  
plasma assisted MBE*

№132 Vladimir Toporov, and Bakhysh Bairamov  
*Influence of Nitrogen Impurities on Polarization Properties of Lattice Vibrations of  
Diamond*

№133 Yana Kuznetsova , Farid Bayramov , Vladimir Toporov , Bakhysh Bairamov ,  
Vasilii Rud , and Aleksei Glinushkin *Recombination radiation of heteroepitaxial structures  
with InAs quantum dots grown on surface of (311)B GaAs by MBE*

**17.00-  
18.00**

*Room 2  
Zoom*

<https://us02web.zoom.us/j/85057135199?pwd=NTJK-cHZ0bC9DbCtPVG5VNmNTbkIDdz09>

*Идентификатор конференции: 850 5713 5199  
Код доступа: 320473*

*Section 5*

*№8 Alina Mironkina Sergei Kharitonov*

*Cluster model of agrotourism development and its promotion among young people*

*№10 Vasily Bureiko Anastasia Tungusova Julia Salnikova Sergei Guryanov  
Development and implementation aspects of international Master's degree programs in agriculture*

*№18 Babek Asadov Eldar Asadov*

*New environmental policy of the European Union: some aspects of transition to green energy*

*№22 Babek Asadov Alexander Baranov Sofia Baranova Inga Philippova*

*Ecological and humanitarian approach to assessing the tourist and recreational attractiveness of cultural landscapes drawing on the example of the unesco world heritage site "Curonian Spit"*

*№25 Pavel Nedelko*

*Features of interaction between the Russian education system and student environmental organizations*

*№85 Vasily Bureiko Anastasia Tungusova Julia Salnikova Sergei Guryanov  
Development of ecological tourism on the territory of the Yuntolovsky State Nature Reserve*

*№94 Anton Zaitsev How to spread sustainable eco-volunteering practices across the globe*

*№130 L.V. Startseva Vegetable breeding for immunity*

**18.00-  
19.00**

*Room 1*

*Zoom*

<https://us02web.zoom.us/j/83677180682?pwd=NXdlZ0lsMHlSai9xVGFXM3JFc29rdz09>

*Идентификатор конференции: 836 7718 0682*

*Код доступа: 783281*

*Assuming Awards Closing*