

MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN FEDERATION

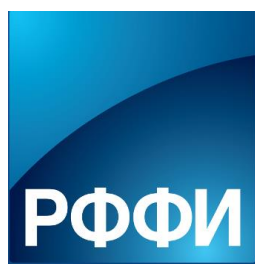
Russian Fond for Basic Research

Federal State Autonomous Educational Institution of Higher Education

"Southern Federal University"

Institute of Earth Sciences

Non-governmental organization "Russian geographical society"



## **“Ecological Problems. A Look into the Future”**

### **THE PROGRAM**

**of the VIII International Scientific and Practical Conference**

**recreation center “Vityaz” – recreation center “Limanchik”**

**8–11 September 2017**

*Dedicated to the Year of Ecology in the Russian Federation*

*Dedicated to the 70<sup>th</sup> anniversary of the Rostov Regional Branch of the Russian  
Geographical Society*

**The work was supported by grant № 17-05-20426 from the RFBR**

## The Organizing Committee of the Conference

### Chairman:

**Fedorov Yury** – Chief researcher of the Institute of Earth Sciences, Southern Federal University, Head of the Department of Physical Geography, Ecology and Environmental protection, D.Sc., professor, president of the Rostov regional section of Russian Geographical Society

### Co-chairs:

**Borovskaya Marina** – Rector of Southern Federal University, delegate of the Presidium of the presidential Council of the Russian Federation for Science and Education, A.M. of the Russian education Academy, D.Sc., professor

**Kuznetsov Andrey** – Director of the Institute of Earth Sciences, Southern Federal University, Ph.D., associate professor

### Committee members:

**Fattal Paul** – Vice president of the University of Nantes, France, D.Sc., professor

**Buzmakov Sergey** – Head of the Department of biogeocenology and nature protection of Nature, Perm State National Research University, Doctor of Economics, Professor;

**Dobrolyubov Sergey** – Dean of the Geographical faculty, Lomonosov Moscow State University, D.Sc., professor, A.M. of the Russian Academy of Sciences,

**Dotsenko Irina** – Deputy head for educational and methodical work of the Department of Physical Geography, Ecology and Environmental protection of the Southern Federal University, Ph.D., associate professor

**Zyryanov Valery** – Head of the Laboratory of Hydrodynamics, Institute of Water Problems RAS, D.Sc., professor

**Cabannes Claude** – D.Sc., professor emeritus, University of Nantes, France

**Kasimov Nikolay** – President of the Geographical faculty, Lomonosov Moscow State University, 1<sup>st</sup> vice-president of the Russian Geographical Society, D.Sc., professor, Academician of the RAS

**Korobov Vladimir** – Director of the North-West section of the P. Shirshov Institute of oceanology RAS, D.Sc., professor

**Lisitsyn Aleksandr** – Head of the Laboratory of Physical and Geological Research, Ch. Researcher of the P. Shirshov Institute of oceanology RAS, D.Sc., Academician of the RAS

**Luque Enrique Garcia** – Professor of the University of Cadiz, Spain, PhD

**Lourie Petr** – Chief Hydrologist of the UK UGMS (Roshydromet), D.Sc., professor

**Minkina Tatyana** – Head of the Department of Soil Science and Land Resources Assessment, Southern Federal University, D.Sc., professor

**Chistyakov Kirill** – Director of the Institute of Earth Sciences, St. Petersburg State University, vice-president of the Russian Geographical Society D.Sc., professor

**Shevchenko Vladimir** – leading researcher, the P. Shirshov Institute of oceanology RAS, Ph.D.

**Shevchenko Inna** – vice-rector for scientific and innovative activity of Southern Federal University, D.Sc., professor

### Executive secretary:

**Mikhailenko Anna** – Senior lecturer of the Department of Physical Geography, Ecology and Environmental protection of the Southern Federal University, Ph.D

### **The Program Committee of the Conference**

**Bogucharskov Victor** – Professor of the Department of Physical Geography, Ecology and Environmental protection of the Southern Federal University, D.Sc., professor

**Natalia Barannikova** – Deputy Director of the Institute of Earth Sciences for work with entrants

**Barbero González Luís** – Head of the Department of Petrology and Geochemistry of the University of Cadiz, Spain, D.Sc., professor

**Garkusha Dmitry** – Associate professor of the Department of Physical Geography, Ecology and Environmental protection of the Southern Federal University, Ph.D

**Zimovets Alina** – Senior lecturer of the Department of Physical Geography, Ecology and Environmental protection of the Southern Federal University, Ph.D

**Nazarenko Olesya** – Associate professor of the Department of Physical Geography, Ecology and Environmental protection of the Southern Federal University, Scientific Secretary of the Expert Council "Sciences of the Earth, Marine Sciences, Ecology", Ph.D

**Perales José Antonio** – Head of Laboratory of Biological Wastewater Treatment of the University of Cadiz, Spain, Ph.D., professor

**Rollo Nicolas** – associate professor at the Institute of Geography and Regional Development of the University of Nantes, France

**Yamaris Swabi Quao** – research associate of the University of Olgien, Cuba.

**The main scientific directions of the VIII<sup>th</sup> International Scientific and Practical Conference "Ecological problems. A look into the Future":** geography, ecology and environmental management, hydrology, oceanography.

#### **Sections:**

- Global, regional and local ecological and geographical problems..
- Physical geography in the modern world.
- Trends theoretical and applied aspects of sustainable development.
- Theoretical and practical problems of ecology, environmental protection and rational nature management.
- Monitoring, diagnosis and indication of natural and anthropogenic terrestrial and aquatic landscapes.
- Water resources, hydrology and hydrochemistry of surface water.
- Environmental problems of ocean, marine and estuarine waters, including the Arctic region.
- Climate change: environmental, juristic and economic problems of the Russian Federation and other countries.

The duration of the plenary reports is 30 minutes, oral presentations - 15 minutes.

Presentations should be presented in the format Microsoft Office Power Point 2003-2007.

**Conference languages: Russian, English, French, Spanish.**

## ОБЩАЯ ПРОГРАММА РАБОТЫ КОНФЕРЕНЦИИ

<i>SEPTEMBER 08, FRIDAY</i>	
<b>10<sup>h</sup>00 – 11<sup>h</sup>00</b>	Registration of Conference participants
<b>11<sup>h</sup>00 – 12<sup>h</sup>00</b>	Opening Ceremony of the Conference
<b>12<sup>h</sup>00 – 13<sup>h</sup>00</b>	Coffee break
<b>13<sup>h</sup>00 – 16<sup>h</sup>00</b>	Plenary session
<i>SEPTEMBER 09, SATURDAY</i>	
<b>10<sup>h</sup>00 – 12<sup>h</sup>00</b>	Session of oral presentations
<b>12<sup>h</sup>00 – 13<sup>h</sup>00</b>	Coffee break
<b>13<sup>h</sup>00 – 16<sup>h</sup>15</b>	Session of oral presentations
<b>16<sup>h</sup>30 – 17<sup>h</sup>00</b>	Session of posters
<i>SEPTEMBER 10, SUNDAY</i>	
<b>10<sup>h</sup>00 – 12<sup>h</sup>00</b>	Session of oral presentations
<b>12<sup>h</sup>00 – 13<sup>h</sup>00</b>	Coffee break
<b>13<sup>h</sup>00 – 15<sup>h</sup>30</b>	Session of oral presentations
<b>15<sup>h</sup>45 – 17<sup>h</sup>00</b>	Roundtable discussion. Summing up the results of the Conference. Closing Ceremony of the Conference
<i>SEPTEMBER 11, MONDAY</i>	
<b>10<sup>h</sup>00 – 13<sup>h</sup>00</b>	Departure of Conference participants

### Friday, September 08, 2017

**10<sup>h</sup>00 – 11<sup>h</sup>00 Registration of Conference participants**

#### OPENING CEREMONY OF THE CONFERENCE

Chairmen of the section – **Fedorov Yury**, D.Sc., professor, Russia; **Fattal Paul**, D.Sc., professor, France; **Kuznetsov Andrey**, Ph.D., associate professor, Russia

#### **10<sup>h</sup>00 – 11<sup>h</sup>00 Opening of the VIII International Scientific and Practical Conference "Ecological Problems. A Look into the Future"**

##### Greetings of

**11<sup>h</sup>00 – 11<sup>h</sup>15** Chairman of the Organizing Committee of the Conference, Doctor of science, Professor of Southern Federal University – **Fedorov Yury**

**11<sup>h</sup>15 – 11<sup>h</sup>30** Director of the Institute of Earth Sciences of the Southern Federal University, Ph.D., Associate Professor - **Kuznetsov Andrey**

**11<sup>h</sup>30 – 11<sup>h</sup>45** Vice-President of the University of Nantes, France Doctor of science, Professor – **Fattal Paul**

**12<sup>h</sup>00 – 13<sup>h</sup>00 Coffee break**

#### **13<sup>h</sup>00 – 16<sup>h</sup>00 Plenary session**

**13<sup>h</sup>00 – 13<sup>h</sup>30** *Zyryanov V.N.* Ice and under the ice processes

**13<sup>h</sup>30 – 14<sup>h</sup>00** *Morin T., Cheng Z., Deeb M., Olsen M.* Evaluation of chemical and physical properties of stormwater management Greenstreets in New York City

### 14<sup>h</sup>00 – 14<sup>h</sup>30 Coffee break

- 14<sup>h</sup>30 – 15<sup>h</sup>00 *Buzmakov S.A.* Technogenes and transformation of environment in the karst area at oil production
- 15<sup>h</sup>00 – 15<sup>h</sup>30 *Dotsenko I.V.* Geochemistry of trace elements in conditions of permanent changing wind situations
- 15<sup>h</sup>30 – 16<sup>h</sup>00 *Gar'kusha D.N., Fedorov Yu.A., Tambieva N.S., Andreev A.Yu., Mikhailenko O.A.* Methane and hydrogen sulphide in lake Baikal

## Saturday, September 09, 2017

Chairmen of the section – **Bogucharskov Victor**, D.Sc., professor, Russia; **Zyryanov Valery**, D.Sc., professor, Russia

### 10<sup>h</sup>00 – 16<sup>h</sup>15 Session of oral presentations

- 10<sup>h</sup>00 – 10<sup>h</sup>15 *Bogucharskov V.T.* About the history of the Russian Geographical Society, Rostov branch
- 10<sup>h</sup>15 – 10<sup>h</sup>30 *Taskin A.V., Danilov O.S.* Analysis of the chemical composition of TPS ash and slag wastes of the Far eastern region of Russia, technological solutions for the organization of complex processing of ash and slag wastes from energy enterprises
- 10<sup>h</sup>30 – 10<sup>h</sup>45 *Khmelevtsova L.E., Sazykin I.S., Seliverstova E.Y., Sarafanyuk V.N., Sazykina M.A.* Influence of reactive oxygen species generated by microorganisms on the processes of hydrocarbon pollution remediation
- 10<sup>h</sup>45 – 11<sup>h</sup>00 *Popov Yu.V.* Ecological-geochemical state estimation of the natural environment of ore nodes: factors and criteria
- 11<sup>h</sup>00 – 11<sup>h</sup>15 *Sazykina M.A., Sazykin I.S.* Ecotoxicological monitoring of environment objects with a battery of bacterial lux-sensors
- 11<sup>h</sup>15 – 11<sup>h</sup>30 *Chernykh V.I.* The creation of a local monitoring system of the coal-mining district
- 11<sup>h</sup>30 – 11<sup>h</sup>45 *Drozdova O.Yu., Lapitskiy S.A.* Transformation of organic substances during migration in the stream
- 11<sup>h</sup>45 – 12<sup>h</sup>00 *Kruglyakova R., Kuriliv P., Terenoshkin A.* Ecological condition of estuaries delta of the Kuban River

### 12<sup>h</sup>00 – 13<sup>h</sup>00 Coffee break

- 13<sup>h</sup>00 – 13<sup>h</sup>15 *Fedorov Yu.A., Savitskiy V.A., Zimovets A.A.* Distribution of mercury in bottom sediments along the profile "The Kyanda River – the Onega Bay of the White Sea"
- 13<sup>h</sup>15 – 13<sup>h</sup>30 *Grishantseva E.S., Alekhin U.V., Bychkova Y.V., Chervyakova S.P., Bychkov D.A.* Comparative geochemical analysis of the compositions of bottom sediments of watercourses and reservoirs of the boreal climate zone (on the example of Vladimir and Tver Regions)
- 13<sup>h</sup>30 – 13<sup>h</sup>45 *Bezuglova O.S., Golozubov O.M., Litvinov Yu.A., Chernova O.V.* Red book of soils as a database for monitoring research
- 13<sup>h</sup>45 – 14<sup>h</sup>00 *Makhinov A.N., Makhinova A.F., Liu Shuguan* Conditions of elements migration in soil-geochemical systems of the Amur river basin
- 14<sup>h</sup>00 – 14<sup>h</sup>15 *Shipkova G.V., Fedorov Yu.A., Minkina T.M., Afanasev K.A.* Biogeochemical features of the landscape components of Polistovsky natural reserve
- 14<sup>h</sup>15 – 14<sup>h</sup>30 *Shulkin V.M., Mikhailik T.A., Tishchenko P.Ya.* Influence of the hydrological extremes on the chemical composition of river waters (on examples of Russian Far East)
- 14<sup>h</sup>30 – 14<sup>h</sup>45 *Ergina E.I., Juk V.O.* Influence and dangerous extreme weather events on the modern landscape in the Crimea
- 14<sup>h</sup>45 – 15<sup>h</sup>00 *Vorobyev S.A.* Prediction soils compositions by sampling the stream sediments
- 15<sup>h</sup>00 – 15<sup>h</sup>15 *Volkov V.N., Tarasov M.G.* Ecological and hydrogeological problems on the territory of the Botanical garden of SFedU and the ways of their solution

- 15<sup>h</sup>15 – 15<sup>h</sup>30** *Zhuravleva M.V., Karchava S.K., Kudeevskaya E.M., Gildebrant A.V., Sazykin I.S., Sazykina M.A.* Content of antibiotics in soils of the Rostov Region
- 15<sup>h</sup>30 – 15<sup>h</sup>45** *Chepurnaya T.A., Rekov Yu.I.* Changes in stocks of the azov sturgeons during the period of sturgeon fishing ban
- 15<sup>h</sup>45 – 16<sup>h</sup>00** *Nazarenko O.V.* Some hydrochemical characteristics of rivers in mining areas (a case of East Donbass)
- 16<sup>h</sup>00 – 16<sup>h</sup>15** *Lipatnikova O.A., Shestakova T.V., Gromova V.A.* Point of zero charge determination in soils from the Pioneer Dam of the Urupskiy tailing Dump

**16<sup>h</sup>15 – 16<sup>h</sup>30 Coffee break**

**16<sup>h</sup>30 – 17<sup>h</sup>00 Session of posters**

- Avtushenko Y.Y.* Mechanical aspects of the interaction of modern engineering structures and the geological environment (on the example housing projects in Rostov-on-Don)
- Bakaeva E.N., Taradayko M.N.* Biodiagnostics bottom sediments toxicity of the sever sky donets basin small rivers by the set of bioassays
- Ballinger O.Yu.* Environmental audit of surface waters of lands
- Gartman Yu.V., Nikitina K.M., Zimovets A.A.* Study of the problem of pollution by heavy metals of various components of landscapes of the Murmansk Region
- Gashevskaya A.S., Derina K.V., Dorozhko E.V.* Determination of heavy metals in drinking water
- Denisov V.I., Tkachenko Yu.Yu.* Biological concentration of some trace elements by ascidians and mussels of the Black Sea
- Glushko A.E., Mikhailenko A.V.* Bioindication of cultural landscapes of the southern portion of the Crimea Peninsula
- Gusar A.O., Guba G.Ya., Dorozhko E.V.* The synthesis of oligomers lactic acid in the presence of alanine in the conditions of microwave irradiation
- Dmitrik L.Yu., Trubnik R.G., Yaroslavtsev V.M., Starodubtsev A.F.* Expeditional investigations of the bottom sediments and water of Pilyonkino Lake and nearest waters
- Zaikina V.N.* Heavy metals in soils of the Volgograd Agglomeration
- Quao Y.S., Cruz S.F.* Gestión ambiental de las fuentes agua en el ecosistema norte de la provincia Holguín, Cuba
- Kuznecova I.D.* The effect of salinity changes on the geographical distribution of the azov-black sea migratory herring in the Sea of Azov
- Lourie P.M.* Change of flow distribution along branches in the Don River delta due to a climate change
- Mikhailenko A.V., Ruban D.A.* Ecosystem services: modern theoretical ideas and practical importance
- Naehl T.* Integrated building greening for sustainable cities - the need for soils
- Savitskiy V., Fedorov Yu., Zalouk-Vergnoux A., Ovsepyan A.* Les premières données sur la distribution du mercure dans les sédiments du fond selon le profil “La rivière de Loire – le Golfe de Gascogne”
- Solodko D.F., Mikhailenko A.V.* Physical-geographical peculiarities of formation of currents in the Sea of Azov
- Sukhorukov V.V., Gar'kusha D.N., Gonzalez A., Tassin D.* Structure of education and study experience in the University of the city of Cadíz
- Tagiverdiev S.S., Bezuglova O.S., Gorbov S.N., Kotik M.V., Kozyrev D.A., Romanjuta E.M.* About the physical properties of soil cover of urban landscapes on the example of Rostov-on-Don
- Tischenko S.A.* Assessment of the Rostov-on-Don recreational areas using the fluctuating asymmetry method

*Fattal P., Juigner M., Le Mauff B., Rollo N., Robin M., Debaine F., Kerguillec R.* Suivi du trait de côte sur le littoral vendéen (Pays de monts - France). De l'intérêt de l'observation.

*Firulina I.I., Gilmanova D.R.* The issue of waste in the Samara Region

*Khammami M.I., Kudeevskaya E.M., Gildebrant A.V., Sazykin I.S., Sazykina M.A.* Ecotoxicological and sanitary-bacteriological analysis of Rostov-on-Don spring water

*Chepurnaya V.I., Dotsenko I.V.* Salinity of the Azov Sea as the main factor affecting the distribution of young semi-migratory fish

*Chuprakova A.A.* Heavy metals in the landscape of the Bolshoe Bogdo Mount

*Shishkina D.Yu.* The land use structure as an indicator of anthropogenic load (on the example of Rostov Region)

## Sunday, September 10, 2017

Chairmen of the section – **Buzmakov Sergey**, D.Sc., professor, Russia; **Dotsenko Irina**, Ph.D., associate professor, Russia; **Garkusha Dmitry**, Ph.D., associate professor, Russia

### 10<sup>h</sup>00 – 15<sup>h</sup>45 Session of oral presentations

**10<sup>h</sup>00 – 10<sup>h</sup>15** *Fiaizullina R.V., Alekhin Yu.V., Bychkov D.A.* Mercury in the atmospheric air of certain regions of Russia

**10<sup>h</sup>15 – 10<sup>h</sup>30** *Khoroshevskaya V.O., Predeina L.M.* Peculiarities of the influence of anionic forms of molybden on the indicators of the development of phytoplankton in experiments on natural waters

**10<sup>h</sup>30 – 10<sup>h</sup>45** *Fedorov Yu.A., Dmitrik L.Yu., Dotsenko I.V.* Wind environment and its impact on the levels of dissolved total iron in the Sea of Azov

**10<sup>h</sup>45 – 11<sup>h</sup>00** *Zimovets A.A., Ovsepyan A.E.* The regularity of heavy metals distribution in the bottom sediments on the profile "The Northern Dvina River – the White Sea"

**11<sup>h</sup>00 – 11<sup>h</sup>15** *Ovdina E.A., Strakhovenko V.D., Melgunov M.S.* Radioecological assessment of the southern taiga zone sapropels (Western Siberia)

**11<sup>h</sup>15 – 11<sup>h</sup>30** *Seliverstova E.Y., Sazykin I.S., Khmelevtsova L.E., Danilova K.V., Sazykina M.A.* Concentration of antibiotic-resistance genes in biocenoses of the Lower Don

**11<sup>h</sup>30 – 11<sup>h</sup>45** *Yaroslavtsev V.M., Fedorov Yu.A.* Uranium-238 in the bottom sediments in fresh and salt lakes of the south of the European Territory of Russia

**11<sup>h</sup>45 – 12<sup>h</sup>00** *Kuznetsov A.N., Fedorov Yu.A., Fattal P.* Results of observations of natural transformation of spilled fuel oil from the tanker "Prestige" on the north-western coast of Spain

### **12<sup>h</sup>00 – 13<sup>h</sup>00 Coffee break**

**13<sup>h</sup>00 – 13<sup>h</sup>15** *Potapov E.G., Dubinina E.O., Kossova S.A., Avdeenko A.S., Danilov S.R.* Isotope composition of the reduced and oxygenated sulfur of the CMW district mineral waters: new data

**13<sup>h</sup>15 – 13<sup>h</sup>30** *Zubkov E.A., Gar'kusha D.N.* The influence of groundwater built up and agricultural areas of southern Rostov Region on the water quality of the Lower Don

**13<sup>h</sup>30 – 13<sup>h</sup>45** *Lubkova T.N., Yablonskaya D.A., Shestakova T.V., Pchelintseva N.F., Nikolaeva I.Y.* Prediction of drainage water composition under mining of sulphide deposits (the northeast of Russia)

**13<sup>h</sup>45 – 14<sup>h</sup>00** *Trubnik R.G., Fedorov Yu.A.* Regularities of distribution of sulphite-reducing clostridia in therapeutic muds of the Taman Peninsula

**14<sup>h</sup>00 – 14<sup>h</sup>15** *Nikolaeva A.A.* Fluorometric determination of azo dyes in food products

**14<sup>h</sup>15 – 14<sup>h</sup>30** *Gorbov S.N.* Ecological estimation of main types soil of urban landscape of "Bolshoy Rostov"

- 14<sup>h</sup>30 – 14<sup>h</sup>45** *Kotova V.E., Andreev Yu.A., Chernov'yants M.S.* Using HPLC method for determination of indicator ratios markers of PAH sources
- 14<sup>h</sup>45 – 15<sup>h</sup>00** *Tarasov M.G., Volkov V.N.* Using trasser studies for solving environmental problems
- 15<sup>h</sup>00 – 15<sup>h</sup>15** *Fedorov Yu.A.* The classification of the rapeutic mud
- 15<sup>h</sup>15 – 15<sup>h</sup>30** *Molozshnikova Y.V., Kuchmenko Y.V.* Evaluation of the contribution of major industrial zones in the pollution of river valley based on the methods of industrial metabolism
- 15<sup>h</sup>30 – 15<sup>h</sup>45** *Dotsenko I.V., Fedorov Yu.A., Mikhailenko A.V.* Conceptual model of the behavior of heavy metals in suspended matter
- 15<sup>h</sup>45 – 16<sup>h</sup>00** *Coffee break*
- 16<sup>h</sup>00 – 17<sup>h</sup>00** *Roundtable discussion. Summing up the results of the Conference.  
Closing Ceremony of the Conference*

## CONTACTS

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**Tel.:** +7 961 27 01 842 – Department of Physical Geography, ecology and environmental protection;

**Tel.:** +7 908 50 60 451 – Secretary of the conference Anna Mikhailenko

**E-mail:** avmihaylenko@sfedu.ru

Information about the conference is available on the website  
[http://sfedu.ru/www/stat\\_pages22.show?p=GEO/N12998](http://sfedu.ru/www/stat_pages22.show?p=GEO/N12998)

## **VIII International Scientific and Practical Conference "Ecological problems. A look into the Future" will be held on recreation center "Vityaz" of the Southern Federal University**

**Postal address:** 353490, Krasnodar region, Gelendzhik, p. Divnomorskoe, ul. Kurortnaya, 6, recreation center "Vityaz".

### **Travel description:**

From **Gelendzhik airport** to the city bus station (30 km, 25 minutes), then a shuttle bus, or a regular bus to the village of Divnomorskoe (12 km, 10 minutes).

From **the airport or railway station in Krasnodar** by shuttle bus or regular bus to the bus station in Gelendzhik (180 km, 3.5-4 hours), then a shuttle bus, or a regular bus to the village of Divnomorskoe (12 km, 10 minutes).

From **Anapa airport** by shuttle bus or regular bus to the bus station of Gelendzhik (85 km, 2.5 hours), then a shuttle bus, or a regular bus to the village of Divnomorskoe (12 km, 10 minutes).