

**XIV МЕЖДУНАРОДНАЯ КОНФЕРЕНЦИЯ  
XIV INTERNATIONAL CONFERENCE**

**КОСМОС И БИОСФЕРА  
COSMOS & BIOSPHERE**

**ПРОГРАММА  
PROGRAM**

**25 - 28 мая, 2021**

**May 25 - 28, 2021**

## PROGRAMM

Tuesday - 05/25/2021

10.00 - 11.30 - Registration of participants and connection of conference participants to the online platform.

**11.30 - Conference opening. Greetings to the conference participants.**

PLENARY SESSION	
Chairpersons: Chuyan E.N., Vladimirsky B.M., Vincenzo Valenzi	
12.00 – 12.20	<i>Vladimirsky B.M.</i> <b>Space weather and “explosions” of the creative efficiency: “axial time” – a glance from XXI century</b> V.I. Vernadsky Crimean Federal University, Republic of Crimea, Simferopol, Russia
12.30 – 11.50	<i>Ragulskaya M., Tekutskaya E.</i> <b>Solar activity global minimum and genogeographic features of the COVID-19 pandemic</b> Solar physic and Solar-Terrestrial Relations Department, Institute of Terrestrial Magnetism and Radio Wave Propagation RAS, Moscow, Russia
13.00 – 13.20	<i>Avakyan S.V., Baranova L.A.</i> <b>The influence of microwave radiation from the geocosmos on the state of a living organism</b> Russian Scientific Center “SI Vavilov State Optical Institute”, St-Petersburg, Russia
13.30 – 13.50	<i>Retejum A.Ju.</i> <b>Revealing the destructive consequences of the human body’s cells ionization by galactic cosmic rays</b> Lomonosov Moscow State University
<b>14.00 – 14.20</b>	<b>COFFEE BREAK</b>
14.30 – 14.50	<i>Scalia M., Pulcini F., Sperini M.</i> <b>Air ions: measures 1998-2019</b> Department of Bioelectromagnetism CIRPS, Rome, Italy
15.00 – 15.20	<i>Widom A., Swain J., Srivastava Y.N.</i> <b>Extremely Low Frequency Ion Cyclotron Resonances on the Surface Boundaries of Coherent Water Domains</b> Department of Integrative Medicine and Biophysics UNIFEDER, Florence, Italy
15.30 – 15.50	<i>Morozova L.N.</i> <b>A.L. Chizhevsky - a pioneer of space science</b> A.L. Chizhevsky House-Museum, Department of the K.E. Tsiolkovsky State Museum History Cosmonautics, Kaluga, Russia

**XIV МЕЖДУНАРОДНАЯ КОНФЕРЕНЦИЯ «КОСМОС И БИОСФЕРА»  
XIV INTERNATIONAL CONFERENCE «COSMOS & BIOSPHERE»**

**26.05.2021, Wednesday**

Workshop	
Председатели: Samsonov S.N., Scalia M., Plugar E.V., Trofimov A. V.	
WORKSHOP 1. SPACE WEATHER AND BIOLOGICAL PROCESSES	
10.00 – 10.10	<p><u>Mel'nikova Ye.B., Melnikov A.V.</u></p> <p><b>Solar radiation as a synchronizing factor of circadian and ultradian biological rhythms of planktonic communities</b></p> <p>Institute of Natural and Technical Systems, Lenin St, 28, 299011 Sevastopol, Russian Federation</p>
10.20 – 10.30	<p><u>Sukharev V.A., Dyadichev V.V., Menyuk S.G.</u></p> <p><b>Hidden Space Threats and Extraordinary Developments in the Solar System</b></p> <p>V.I. Vernadsky Crimean Federal University, Republic of Crimea, Simferopol, Russia</p>
10.40 – 10.50	<p><u>Scalia M., Pulcini F., Sperini M.</u></p> <p><b>Electromagnetic characterization of the environment. An Italian experience and the “mapping” method</b></p> <p>Department of Bioelectromagnetism CIRPS, Rome, Italy</p>
11.00 – 11.10	<p><u>Scalia M., Doro T., Uhl L., Valenzi V.</u></p> <p><b>Measuring electro-physiological response to a Tibetan bell as stimulating agent</b></p> <p>Department of Bioelectromagnetism CIRPS, Rome, Italy</p>
WORKSHOP 2. SPACE WEATHER AND MEDICINE	
11.20 – 11.40	<p><u>Samsonov S., Parshina S.</u></p> <p><b>Space weather in the 11-year solar cycle and cardio-sensitivity of volunteers in the middle latitudes</b></p> <p>Institute of Cosmophysical Research and Aeronomy of Siberian Branch of the Russian Academy of Sciences, Yakut Scientific Centre of Siberian Branch of the Russian Academy of Sciences, Yakutsk, Russia</p>
11.50 – 12.00	<p><u>Samsonov S., Parshina S.</u></p> <p><b>The features of the bio-efficiency of geomagnetic activity on the sub-auroral latitudes in the minimum of the 11-year solar cycle</b></p> <p>Saratov State Medical University n.a. V.I. Razumovsky of the Ministry of Health of Russia, Saratov, Russia</p>
12.10 – 12.20	<p><u>Melnikova V.M., Sapegin I.D., Beliakova A.G.</u></p> <p><b>Cerebral vessels reactivity disorders in microgravity and its</b></p>

**XIV МЕЖДУНАРОДНАЯ КОНФЕРЕНЦИЯ «КОСМОС И БИОСФЕРА»  
XIV INTERNATIONAL CONFERENCE «COSMOS & BIOSPHERE»**

	<p><b>pharmacological correction with new derivatives of 1,2,4-triazole</b></p> <p>V.I. Vernadsky Crimean Federal University, Republic of Crimea, Simferopol, Russia</p>
12.30 – 12.40	<p><i>Kodochigova A.I., Samsonov S.N., Polivanov M.A.</i></p> <p><b>Psychological characteristics of the Heliomed 2 project volunteers and geomagnetic disturbance at high latitudes</b></p> <p>Saratov State Medical University named after V.I. Razumovsky, Saratov, Russia</p>
12.50 – 13.00	<p><i>Rishtakov S.Ph., Bobrik Yu.V., Rybalko S.Yu.</i></p> <p><b>The Efficiency of Neurofeedback during Treatment and Rehabilitation of Patients with Anxiety and Depressive Disorders</b></p> <p>V.I. Vernadsky Crimean Federal University, Republic of Crimea, Simferopol</p>
13.10 – 13.20	<p><i>Stupishina O.M., Golovina E.G., Noskov S.N.</i></p> <p><b>The relation of the human cardiac-events to the environmental complex variations</b></p> <p>Physics Department, Saint-Petersburg State University, Saint-Petersburg, Russia</p> <p>Meteorological Faculty of the Department of Meteorology, Climatology and Atmospheric Protection, Russian State Hydrometeorology University, Saint-Petersburg, Russia</p> <p>North-West Public Health Research Center, Saint-Petersburg, Russia</p> <p>North-Western State Medical University named after I.I. Mechnikov, Saint-Petersburg, Russia</p>
13.30 – 14.00	<b>COFFEE BREAK</b>
<b>WORKSHOP 3. SCIENCE, TECHNOLOGIES AND EDUCATION ARE AT SUSTAINABLE NOOSPHERIC DEVELOPMENT'S SERVICE</b>	
14.00 – 14.10	<p><i>Smirnov V.O., Snegur A.V., Filinko Y.V.</i></p> <p><b>National Research &amp; Education Network of Meteorological Monitoring in the V. I. Vernadsky Crimean Federal University</b></p> <p>V.I. Vernadsky Crimean Federal University, Republic of Crimea, Simferopol, Russia</p>

**XIV МЕЖДУНАРОДНАЯ КОНФЕРЕНЦИЯ «КОСМОС И БИОСФЕРА»**  
**XIV INTERNATIONAL CONFERENCE «COSMOS & BIOSPHERE»**

14.20 – 14.30	<p><i>Smirnov V.O., <u>Sergeev M.A.</u>, Emelianova N.S.</i></p> <p><b>Digitalization for remote monitoring to sustainable development of agrarian areas at V.I. Vernadsky Crimean Federal University</b></p> <p>V.I. Vernadsky Crimean Federal University, Republic of Crimea, Simferopol, Russia</p>
<p><b>WORKSHOP 4. ENVIRONMENTAL PROBLEMS OF THE BIOSPHERE AND CIRCUMTERRESTRIAL COSMIC SPACE</b></p>	
14.40 – 14.50	<p><i>Trofimov A.V.</i></p> <p><b>Helio-pressing» at natural and technogenic geomagnetic deprivation of human populations into megacities/ questions of modeling and prevention</b></p> <p><i>International Scientific Research Institute of Cosmoplanetary Anthropoecology Novosibirsk, Russia</i></p>
15.00 – 15.10	<p><i>Pozachenyuk E.A.</i></p> <p><b>Classification of Dry Land and Ocean's Landscapes</b></p> <p>V.I. Vernadsky Crimean Federal University, Republic of Crimea, Simferopol, Russia</p>
<p><b>WORKSHOP 5. ECONOMICAL GROWTH AND SUSTAINABLE SOCIAL DEVELOPMENT</b></p>	
15.20 – 15.30	<p><i>Plugar E.V., <u>Plugar D.I.</u>, Stakhno N.D.</i></p> <p><b>Space Technologies in Achieving the Aims of the Sustainable Development</b></p> <p>V.I. Vernadsky Crimean Federal University, Republic of Crimea, Simferopol, Russia</p>
15.40 – 15.50	<p><i><u>Simchenko N.A.</u>, Piskun A.I., Khokhlov V.V.</i></p> <p><b>Social Capital and Spatial Development of Sevastopol: Interdependence of the Concepts</b></p> <p>V.I. Vernadsky Crimean Federal University, Republic of Crimea, Simferopol, Russia</p>

**XIV МЕЖДУНАРОДНАЯ КОНФЕРЕНЦИЯ «КОСМОС И БИОСФЕРА»  
XIV INTERNATIONAL CONFERENCE «COSMOS & BIOSPHERE»**

---

---

**27.05. 2021, Thursday**

<b>WORKSHOP 6. BIOLOGICAL EFFECT OF PHYSICAL AND CHEMICAL FACTORS</b>	
<b>Председатели: Chuyan E.N., Tekutskaya E.E., Novikov V.V., Rogacheva S.M., Ravaeva M.Yu.</b>	
10.00 – 10.10	<p><i><u>Tekutskaya E.E., Ryabova I.S.</u></i></p> <p><b>Active Oxygen Forms, DNA Damages, and Solar-terrestrial Connections</b></p>
10.20 – 10.30	<p><i><u>Novikov V.V., Yablokova E.V., Shaev I.A.</u></i></p> <p><b>Decrease of reactive oxygen species (ROS) production by neutrophils after incubation in hypomagnetic conditions</b></p> <p>Institute of Cell Biophysics, Subdivision of the Pushchino Scientific Center for Biological Studies Federal Research Center, Russian Academy of Sciences, Pushchino, Moscow oblast, Russia</p>
10.40 – 10.50	<p><i><u>Yashchenko S.G., Sarchuk E.V., Pilunskaya O.A.</u></i></p> <p><b>The influence of multi-way sources of illumination of monitor screens and changes in the color temperature on the excretion of melatonin metabolite</b></p> <p>V.I. Vernadsky Crimean Federal University. Simferopol. 4 Vernadsky Avenue. Russian Federation</p>
11.00 – 11.10	<p><i><u>Latanov A.V., Shamsiev I.D., Tereshenko L.V.</u></i></p> <p><b>A nonhuman primate model of early effects of irradiation with high-energy protons on operator activity</b></p> <p>School of Biology, Lomonosov Moscow State University, Moscow, Russia Institute for Higher Nervous Activity and Neurophysiology of Russian Academy of Sciences, Moscow, Russia</p>
11.20 – 11.30	<p><i><u>Rybalko S.Yu., Bobrik Yu.V., Korepanov A.L.</u></i></p> <p><b>The Influence of WiFi Range Electromagnetic Radiation on the Parameters of the Human's Heart Rate Variability.</b></p> <p>V.I. Vernadsky Crimean Federal University, Republic of Crimea, Simferopol, Russia</p>
11.40 – 11.50	<p><i><u>Fedianin A.O., Baltina T.V., Ereemeev A.A.</u></i></p> <p><b>The functional state of the neuromotor system during hypogravity in a rat. Support load effects</b></p> <p>Kazan federal university, Russia, Kazan</p>
12.00 – 12.20	<b>COFFEE BREAK</b>
12.20 – 12.30	<p><i><u>Mironyuk I.S., Chuyan E.N. and Cheretaev I.V.</u></i></p> <p><b>Acetylsalicylic acid and its complex compounds with metals: mechanisms of skin microhemodynamic changes</b></p>

**XIV МЕЖДУНАРОДНАЯ КОНФЕРЕНЦИЯ «КОСМОС И БИОСФЕРА»  
XIV INTERNATIONAL CONFERENCE «COSMOS & BIOSPHERE»**

	V.I. Vernadsky Crimean Federal University, Republic of Crimea, Simferopol, Russia
12.40 – 12.50	<i>Mironyuk I.S., Makalish T.P., Aliev M.A.</i> <b>The Influence of Acetylsalicylic Acid and Its Complex Compounds with Metals on the Morphometric Characteristics of the Stomach's Mucous Coat</b> V.I. Vernadsky Crimean Federal University, Republic of Crimea, Simferopol, Russia
13.00 – 13.10	<i>Pridatko A.I., Mironyuk I.S., Chuyan E.N.</i> <b>Dose Dependent Cardiotropic Effect of Magnesium and Lithium Salicylates</b> V.I. Vernadsky Crimean Federal University, Republic of Crimea, Simferopol, Russia
13.20 – 13.30	<i>Khusainov D.R., Korenyuk I.I., Ablyakimov V.L.</i> <b>Frequency-amplitude characteristics of the total biopotentials of the hippocampal CA3 zone under the influence of acetylsalicylic and salicylic acids</b> V.I. Vernadsky Crimean Federal University, Republic of Crimea, Simferopol, Russia
13.40 – 13.50	<i>Dzheldubaeva E.R., Chuyan E.N., Tribat N.S.</i> <b>Change of electromyographic parameters in rats after injection of acetyl salicylic acid and its complex compounds with metals</b> V.I. Vernadsky Crimean Federal University, Republic of Crimea, Simferopol, Russia
14.00 – 14.10	<i>Kolotilova O.I., Korenyuk I.I., Yarmolyuk N.S.</i> <b>Isolated viagra solution application effects on the electrical activity in Helix neurons</b> V.I. Vernadsky Crimean Federal University, Republic of Crimea, Simferopol, Russia
14.20 – 14.30	<i>Birukova E.A., Khusainov D.R., Burtseva Ye.V.</i> <b>Biochemical markers of qualified oriented people's fatigue on the background of taking a functional sport drink "Aluston"</b> V.I. Vernadsky Crimean Federal University, Republic of Crimea, Simferopol, Russia

**XIV МЕЖДУНАРОДНАЯ КОНФЕРЕНЦИЯ «КОСМОС И БИОСФЕРА»  
XIV INTERNATIONAL CONFERENCE «COSMOS & BIOSPHERE»**

14.40 – 14.50	<p><i>Pogodina S.V., Epishkin I.V., Maltsev V.A.</i></p> <p><b>Age-related features of the nonspecific immunological resistance of the body of young swimmers with different metabolic fatigue factors</b></p> <p>V.I. Vernadsky Crimean Federal University, Republic of Crimea, Simferopol, Russia</p>
15.00 – 15.10	<p><i>Orekhova L.S., Mikhailova A.A., Makhin S.A.</i></p> <p><b>Reactivity of the EEG sensorimotor rhythms in early childhood when observing pro- and antisocial actions</b></p> <p>V.I. Vernadsky Crimean Federal University, Republic of Crimea, Simferopol, Russia</p>
15.20 – 15.30	<p><i>Nacharova M.A., Petrenko A.D., Yagenich L.V.</i></p> <p><b>EEG alpha rhythm reactivity during words perception in typically healthy children and children with receptive speech disorder</b></p> <p>V.I. Vernadsky Crimean Federal University, Republic of Crimea, Simferopol, Russia</p>

**28.05.2021, Friday**

<p><b>WORKSHOP 6. BIOLOGICAL EFFECT OF PHYSICAL AND CHEMICAL FACTORS (continuation)</b></p> <p><b>Председатели: Chuyan E.N., Tekutskaya E. E., Novikov V. V., Rogacheva S. M., Ravaeva M. Yu.</b></p>	
10.00 – 10.10	<p><i>Ravaeva M.Yu., Chuyan E.N., Chornobay S.Ye.</i></p> <p><b>The Influence of the Low-intensity Electromagnetic Radiation of mm-range on the Ulcerogenic Damages, Induced by Chronic Hypokinetic Stress</b></p> <p>V.I. Vernadsky Crimean Federal University, Republic of Crimea, Simferopol, Russia</p>
10.20 – 10.30	<p><i>Ravaeva M.Yu., Cheretaev I.V., Galenko-Yaroshevsky P.A.</i></p> <p><b>Role of Catecholamines, Melatonin and Nitric Oxide in the Mechanisms of Stress Damage to the Body</b></p> <p>V.I. Vernadsky Crimean Federal University, Republic of Crimea, Simferopol, Russia</p> <p>Kuban State Medical University, Krasnodar, Russian Federation</p> <p>Belgorod State National Research University, Belgorod, Russian Federation</p>
10.40 – 10.50	<p><i>Ravaeva M.Yu., Cheretaev I.V., Galenko-Yaroshevsky P.A.</i></p>



**XIV МЕЖДУНАРОДНАЯ КОНФЕРЕНЦИЯ «КОСМОС И БИОСФЕРА»  
XIV INTERNATIONAL CONFERENCE «COSMOS & BIOSPHERE»**

	<p><b>Protein, lipid and carbohydrate-energy metabolism indices in rats under acute and chronic hypokinetic stress and their combinations</b></p> <p>V.I. Vernadsky Crimean Federal University, Republic of Crimea, Simferopol, Russia</p> <p>Kuban State Medical University, Krasnodar, Russian Federation</p> <p>Belgorod State National Research University, Belgorod, Russian Federation</p>
11.00 – 11.10	<p><i>Tribrat N.S., Dzheldubaeva E.R., Khusainov D.R.</i></p> <p><b>Changes of the arteries vertebrabasilar pool hemodynamics under the influence of low intensity millimeter radiation</b></p> <p>V.I. Vernadsky Crimean Federal University, Republic of Crimea, Simferopol, Russia</p>
11.20 – 11.30	<p><i>Chmeleva S. I., Dzheldubaeva E.R., Tumanyants K.N.</i></p> <p><b>Adaptogenic Effect of Low-Intensity Millimeter-Wave Electromagnetic Radiation on Glycine max L. under Osmotic Stress</b></p> <p>V.I. Vernadsky Crimean Federal University, Republic of Crimea, Simferopol, Russia</p>
11.40 – 11.50	<p><i>Chmeleva S.I., Dzheldubaeva E.R., Tumanyants K.N.</i></p> <p><b>Influence of low-intensity electromagnetic radiation of the millimeter range on the antioxidant system of Juvenile Glycine max L. plants under osmotic stress</b></p> <p>V.I. Vernadsky Crimean Federal University, Republic of Crimea, Simferopol, Russia</p>
12.00 – 12.10	<p><i>Rogacheva S.M. Otradnova M.I. and Zhutov A.S.</i></p> <p><b>The cell response to the effect of heliogeophysical factors and extremely high frequency radiation of low intensity</b></p> <p>Department of Ecology and Technosphere Safety, Yuri Gagarin State Technical University of Saratov, 77 Politekhnikeskaya St., Saratov, Russia</p> <p>Saratov Medical University “REAVIZ”, ul. Verkhniy Rynok, 10, Saratov, Russia</p>
12.20 – 12.30	<p><i>Tumanyants K.N., Yarmolyuk N.S., Tumanyants E.N.</i></p> <p><b>Influence of ferromagnetic shielding on changes in the nociceptive sensitivity of snails and mice</b></p> <p>V.I. Vernadsky Crimean Federal University, Republic of Crimea, Simferopol, Russia</p> <p>Rehabilitation Center, Candidate of Medical Sciences, Head doctor</p>
12.40 – 13.00	<b>COFFE BREAK</b>
13.00	<b>SUMMERIZING THE CONFERENCE. THE DISCUSSION OF THE</b>

**XIV МЕЖДУНАРОДНАЯ КОНФЕРЕНЦИЯ «КОСМОС И БИОСФЕРА»  
XIV INTERNATIONAL CONFERENCE «COSMOS & BIOSPHERE»**

**RESULTS**

**Announcement of the Jacques Benveniste Award for the best papers at XIV International Conference “Space and Biosphere”**