MINISTRY OF SCIENCE AND HIGHER EDUCATION OF THE RUSSIAN FEDERATION
RUSSIAN ACADEMY OF SCIENCES (RAS)
DEPARTMENT OF BIOLOGICAL SCIENCES OF THE RAS

SHEMYAKIN-OVCHINNIKOV INSTITUTE OF BIOORGANIC CHEMISTRY RAS
LABORATORY OF LIPID CHEMISTRY
LABORATORY OF OXYLIPINS

KARELIAN RESEARCH CENTRE OF THE RUSSIAN ACADEMY OF SCIENCES
(KarRC RAS)
INSTITUTE OF BIOLOGY KarRC RAS
ENVIROMENTAL BIOCHEMISTRY LABORATORY

RUSSIAN BIOCHEMICAL SOCIETY

All-Russian Conference with International Participation
and School for Young Scientists

LIPIDS 2025

September 8–12, 2025

Petrozavodsk, Republic of Karelia, Russia

CONFERENCE PROGRAM

2025

MINISTRY OF SCIENCE AND HIGHER EDUCATION OF THE RUSSIAN FEDERATION
RUSSIAN ACADEMY OF SCIENCES (RAS)
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Petrozavodsk 2025

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CONFERENCE PROGRAM

SEPTEMBER 8, 2025, MONDAY

Main Conference Hall of KarRC RAS, Pushkinskaya St., 11, 2nd floor

09:00-11:00	Registration of conference participants
11:00-11:20	**Conference opening**
11:20-12:40	**Plenary session. School of young scientists**
12:40-14:30	Lunch
14:30-16:30	**Plenary session. School of young scientists**
17:15-19:30	**Welcome party**

SEPTEMBER 9, 2025, TUESDAY

09:30-11:00	**Plenary session**	
11:00-11:20	Coffee break	
11:20-13:20	**Sectional reports**	
11:20-13:20	*Main Conference Hall of KarRC RAS* Section. Research on the structure and function of individual lipid classes involved in organism's regulatory processes	*Hall of the Institute of Geology* Section. Lipid-based drug delivery systems
13:20-14:50	Lunch	
14:50-16:50	**Sectional reports**	
14:50-16:50	*Main Conference Hall of KarRC RAS* Section. Molecular biology of lipid system proteins. Lipidomics (general, specialized, medical, and food lipidomics)	*Hall of the Institute of Geology* Section. Lipid-based drug delivery systems

SEPTEMBER 10, 2025, WEDNESDAY

FREE TIME. EXCURSIONS.

19:00-23:00	**CONFERENCE DINNER**

11 SEPTEMBER 2025, THURSDAY

09:30-11:40	**Plenary session. School of young scientists**	
11:40-12:10	Coffee break	
12:10-13:30	**Sectional reports**	
12:10-13:30	*Main Conference Hall of KarRC RAS* Section. Role of lipids in environmental adaptations of living systems	*Hall of the Institute of Geology* Section. Biological membrane lipids
13:30-15:00	Lunch	
15:00-16:00	**POSTER SESSION**	
16:00-17:00	**Sectional reports**	
16:00-17:00	*Main Conference Hall of KarRC RAS* Section. Role of lipids in environmental adaptations of living systems	*Hall of the Institute of Geology* Section. Biological membrane lipids
17:00-17:20	Coffee break	
17:20-18:20	**Sectional reports**	
17:20-18:20	*Main Conference Hall of KarRC RAS* Section. Role of lipids in environmental adaptations of living systems	*Main Conference Hall of KarRC RAS* Section. Role of lipids in environmental adaptations of living systems

12 SEPTEMBER 2025, FRIDAY

09:00-10:30	**Plenary session**
10:30-11:00	Coffee break
11:00-12:20	**Sectional reports** *Main Conference Hall of KarRC RAS* Section. Novel lipid-based drugs
12:20-13:40	**Sectional reports** *Main Conference Hall of KarRC RAS* Section. Synthetic and analytical lipid chemistry
13:40-15:00	Lunch
15:00-16:00	**Sectional reports** *Main Conference Hall of KarRC RAS* Section. Role of lipids in environmental adaptations of living systems
16:00-16:30	**Conference closing**
16:30-16:50	Farewell coffee break

Main Conference Hall of KarRC RAS - 2nd floor

Hall of the Institute of Geology - 4nd floor

SEPTEMBER 8, 2025, MONDAY

Main Conference Hall of Karelian Research Center RAS (KarRC RAS), 2nd floor

09:00-11:00 – Registration of conference participants

11:00-11:20	**Conference opening** *Chairmans: Dr. Sci., Prof. Vladimir Bezuglov, Dr. Sci., Academician RAS Nina Nemova, Dr. Sci. Elena Vodovozova*	
11:20-12:40	**PLENARY SESSION. SCHOOL OF YOUNG SCIENTISTS** *Chairmans: Dr. Sci. Nina Nemova, Dr. Sci., Prof. Vladimir Bezuglov*	
11:20-12:00	*Distance* **Grechkin Alexander Nikolaevich** *Kazan Institute of Biochemistry and Biophysics of the Kazan Scientific Center of the Russian Academy of Sciences, Kazan, Russia*	**BIOSYNTHESIS OF OXYLIPINS. THE ROLE OF NON-CLASSICAL CYTOCHROMES P450**
12:00-12:40	**Vodovozova Elena Lvovna** *Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, Russian Academy of Sciences, Moscow, Russia*	**LIPOSOMES AS DRUG DELIVERY SYSTEMS. PROTEIN CORONA OF LIPOSOMES AND ITS EFFECT ON INTERACTIONS WITH CELLS OF THE BLOOD STREAM**
12:40-14:30	**Lunch**	
14:30-16:30	**PLENARY SESSION. SCHOOL OF YOUNG SCIENTISTS** *Chairmans: Dr. Sci. Svetlana Murzina, Dr. Sci., Corresponding Member of the RAS Dmitriy Los*	
14:30-15:10	**Bezuglov Vladimir Vilenovich** *Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, Russian Academy of Sciences, Moscow, Russia; National Research Nuclear University MEPhI, Moscow, Russia*	**LIPIDS IN THE INFORMATION SYSTEM OF THE ORGANISM**
15:10-15:50	**Los Dmitry Anatolyevich, Sidorov R.A., Starikov A.Yu.** *Timiryazev Institute of Plant Physiology, Russian Academy of Sciences, Moscow, Russia*	**SUBSTRATE SPECIFICITY OF ACYL-LIPID DESATURASES**
15:50-16:30	*Distance* **Zakharova Lucia Yarulovna, Gaynanova G. A., Vasileva L. A., Vasilieva E. A., Kushnazarova R. A., Kuznetsov D. M., Sinyashin O. G.** *Arbuzov Institute of Organic and Physical Chemistry, FRC Kazan Scientific Center of RAS*	**LIPID NANOCONTAINERS MODIFIED BY SYNTHETIC SURFACTANTS FOR NON-INVASIVE THERAPY OF SOCIALLY SIGNIFICANT DISEASES**
17:15-19:30	**WELCOME PARTY**	

SEPTEMBER 9, 2025, TUESDAY

Main Conference Hall of Karelian Research Center RAS, *2nd floor*

09:30-11:00	**PLENARY SESSION** *Chairmans: Dr. Sci. Elena Vodovozova, Ph.D. Ivan Boldyrev*	
09:30-10:00	**Boldyrev Ivan Alexandrovich** *Frumkin institute of Physical Chemistry and Electrochemistry Russian Academy of Science, Moscow, Russia*	**CONFORMATIONAL DIVERSITY OF LIPIDS**
10:00-10:30	**Soldatov Alexander Alexandrovich[1,2], Borodina A. V.[1], Gostyukhina O. L.[1], Golovina I. V.[1]** *[1]FRC Institute of Biology of the South Seas of the Russian Academy of Sciences, Sevastopol, Russia; [2]Sevastopol State University, Sevastopol, Russia*	**CAROTENOIDS AND ANTIOXIDANT ENZYME COMPLEX TISSUES OF BLACK SEA BIVALVE MOLLUSKS**
10:30-11:00	**Khoroshilova-Maslova I. P.[1], Leparskaya Natalia Leontinovna[2], Vodovozova E. L.[3], Vorotelyak E. A.[4], Alpeeva E. V.[4]** *[1]Helmholtz NMRC Eye Diseases, Ministry of Health, Moscow, Russia; [2]Federal State Budgetary Institution «Main Military Clinical Hospital named after academician N.N. Burdenko» of the Ministry of defense of the Russian Federation», Moscow, Russia; [3]Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, Russian Academy of Sciences, Moscow, Russia; [4]Koltzov Institute of Developmental Biology of Russian Academy of Sciences, Moscow, Russia*	**CLINICAL AND EXPERIMENTAL STUDIES OF THE SAFETY OF MELPHALAN ASSOCIATED WITH LIPOSOMES IN THE TREATMENT OF INTRAOCULAR PROLIFERATIVE PROCESS**
11:00-11:20	**Coffee break**	

SEPTEMBER 9, TUESDAY

11:20-13:20	**SECTIONAL REPORTS**	
	Main Conference Hall of KarRC RAS **Section. Research on the structure and function of individual lipid classes involved in organism's regulatory processes** *Chairmans: Dr. Sci. Rimma Parnova, Ph.D. Ekaterina Kotlova*	*Hall of the Institute of Geology* **Section. Lipid-based drug delivery systems** *Chairmans: Ph.D. Elena Smendel, Ph.D. Svetlana Efimova*
11:20-11:40	**Parnova Rimma Germanovna** *Sechenov Institute of Evolutionary Physiology and Biochemistry of the Russian Academy of Sciences (IEPhB RAS), St. Petersburg, Russia* **MULTIFUNCTIONAL ROLE OF INTRACELLULAR LIPID DROPLETS**	**Shmendel Elena Vasilievna[1], Markov O. V.[2], Zenkova M. A.[2], Maslov M. A.[1]** *[1]Lomonosov Institute of fine Chemical Technologies, MIREA – Russian Technological University, Moscow, Russia; [2]Institute of Chemical Biology and Fundamental Medicine, Siberian Branch, Russian Academy of Sciences, Novosibirsk, Russia RAS* **EFFECT OF NLS PEPTIDE ON THE EFFICIENCY OF pDNA DELIVERY BY TWO-, THREE- AND FOUR-COMPONENT CATIONIC LIPOSOMES**
11:40-12:00	**Kotlova Ekaterina Robertovna[1], Senik S. V.[1], Frolova D. A.[2], Khakulova A. A.[2], Rodina O. A.[1], Bogdanova E. M.[1], Pozhvanov G. A.[1], Puzanskiy R. K.[1], Suslov D. V.[2]** *[1]Komarov Botanical Institute of the Russian Academy of Sciences, Saint-Petersburg, Russia; [2]Saint-Petersburg State University, Saint-Petersburg, Russia* **CONVERSION OF PHOSPHOLIPID MOLECULAR SPECIES IN THE PROCESS OF PLANT CELL DIFFUSE GROWTH**	**Efimova Svetlana Sergeevna, Ostroumova O. S.** *Institute of Cytology of RAS, Saint Petersburg, Russia* **AMPHOTERICIN B LIPOSOMES AND PHYTOSOMES WITH INCREASED POTENCY AND DECREASED TOXICITY**
12:00-12:20	**Senik Svetlana Viktorovna[1], Manzhieva B. S.[1], Frolova D. A.[2], Kotlova E. R.[1]** *[1]Komarov Botanical Institute of the Russian Academy of Sciences, St. Petersburg, Russia; [2]Chemical Analysis and Materials Research Center, St. Petersburg State University, St. Petersburg, Russia* **STRUCTURAL DIVERSITY AND METABOLISM OF MEMBRANE LIPIDS OF FUNGI (BASIDIOMYCOTA)**	**Mikheev Alexey Alexandrovich, Shmendel E. V., Maslov M. A.** *Lomonosov Institute of Fine Chemical Technologies, MIREA – Russian Technological University Technology, Moscow, Russia* **RESEARCH OF PLASMID DNA DELIVERY BY CATIONIC LIPOSOMES BASED ON 2X3 LIPID AND DOPE HELPER LIPID *IN VITRO* AND *IN VIVO***

12:20-12:40	**Toporkova Yana Yurievna, Smirnova E. O., Ogorodnikova A. V., Parfirova O. I., Petrova O. E., Lantsova N. V., Gorshkov V. Y.** *Kazan institute of biochemistry and biophysics, Kazan scientific center, Russian Academy of Sciences, Kazan, Russia* **ALTERATIONS IN THE FUNCTIONING OF THE LIPOXYGENASE CASCADE DURING INFECTION OF TOBACCO AND POTATO PLANTS WITH *PECTOBACTERIUM ATROSEPTICUM*** *Competition of reports of young scientists*	**Puchkov Pavel Anatolyevich[1], Yakovlev O. A.[1], Kerbitskaya M. D.[1], Markov O. V.[2], Shmendel E. V.[1], Maslov M. A.[1]** *[1]Lomonosov Institute of Fine Chemical Technologies, MIREA – Russian Technological University, Moscow, Russia; [2]Institute of Chemical Biology and Fundamental Medicine SB RAS, Novosibirsk, Russia* **PEGYLATED CATIONIC LIPOSOMES FOR *IN VIVO* mRNA DELIVERY** *Competition of reports of young scientists*
12:40-13:00	**Kiseleva Diana Gennadievna[1,2], Ziganshin R. Kh.[3], Cherednichenko V. R.[1], Khovantseva U. S.[1], Markin A M.[1,4,5]** *[1]Petrovsky National Research Center of Surgery, Moscow, Russia; [2]Lomonosov Moscow State University, Moscow, Russia; [3]Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry Russian Academy of Sciences, Moscow, Russia; [4]Peoples' Friendship University of Russia named after Patrice Lumumba, Moscow, Russia; [5]Petrovsky Medical University, Moscow, Russia* **LDL PROTEOMIC PROFILE REVEALS NEW MARKERS OF EARLY ATHEROSCLEROSIS DEVELOPMENT** *Competition of reports of young scientists*	**Naumenko Marina Vladimirovna [1,2], Dushanov E. B.[1,3], Drozhzhin N. A.[1,3], Savostina L. I.[2], Ismagilova E. F.[2], Gorshkova Yu. E.[1,2]** *[1]Joint Institute of Nuclear Research, Dubna, Russia; [2]Institute of Physics, Kazan Federal University, Kazan, Russia; [3]Dubna State University, Dubna, Russia* **COMPLEX BASED ON SULFORAPHANE AND LIPOSOMES: STRUCTURE, PROPERTIES, INTERACTION** *Competition of reports of young scientists*
13:00-13:20	**Boldyreva Lidiya Valerievna[1], Morozova M. V.[1], Evtushenko A. A.[1], Popova E. A.[1], Medvedeva S. S.[2], Shloma V. V.[2], Kozhevnikova E. N.[2], Suldina L. A.[3], Morozova K. N.[3], Kiseleva E. V.[3]** *[1]Scientific Research Institute of Neurosciences and Medicine, Novosibirsk, Russia; [2]Institute of Molecular and Cellular Biology SB RAS, Novosibirsk, Russia; [3]Institute of Cytology and Genetics SB RAS, Novosibirsk, Russia*	**Kuznetsova Daria Alexandrovna, Kuznetsov D. M., Lyubina A. P., Voloshina A. D., Zakharova L. Ya.** *Arbuzov Institute of Organic and Physical Chemistry, FRC Kazan Scientific Center, Russian Academy of Sciences, Kazan, Russia* **FORMATION OF LIPOPOLEXES BASED ON BENZIMIDAZOLIUM SURFACTANTS AND LIPIDS**

	EXOGENOUS PHOSPHOLIPIDS EFFECTS ON THE CELLULAR AND METABOLIC PROCESSES REGULATION IN THE BRAIN OF C57BL/6 LABORATORY MICE	*Competition of reports of young scientists*
13:20-14:50	**Lunch**	
14:50-16:50	*Main Conference Hall of KarRC RAS* **Section. Molecular biology of lipid system proteins. Lipidomics (general, specialized, medical, and food lipidomics)** *Chairmans: Dr. Sci. Alexey Topunov, Dr. Sci. Yana Toporkova*	*Hall of the Institute of Geology* **Section. Lipid-based drug delivery systems** *Chairmans: Dr. Sci. Elena Vodovozova, Ph.D. Rais Pavlov*
14:50-15:10	**Gorina Svetlana Sergeevna, Lantsova N. V., Iljina T. M., Toporkova Y. Y., Grechkin A. N.** *Kazan Institute of Biochemistry and Biophysics, FRC Kazan Scientific Center of RAS, Kazan, Russia* **DISCOVERY OF 16-BRANCH LIPOXYGENASE PATHWAY IN CUCUMBER AND FLAX PLANTS**	**Gretskaya Natalia Mikhailovna** *Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, RAS, Moscow, Russia* **CATIONIC LIPIDS FOR TARGETED DELIVERY OF NUCLEIC ACIDS AND MORE…**
15:10-15:30	**Mishin Alexey Viktorovich, Luginina A. P., Borshchevskiy V. I.** *Research Center for Molecular Mechanisms of Aging and Age-Related Diseases, Moscow Institute of Physics and Technology, Dolgoprudny, Russia* **STRUCTURAL AND FUNCTIONAL STUDIES OF LIPID-SENSING GPCRS**	**Gaynanova Gulnara Akhatovna, Vasileva L. A., Romanova E. A., Valeeva F. G., Kuznetsov D. M., Voloshina A. D., Petrov K. A., Zakharova L. Ya., Sinyashin O. G.** *Arbuzov Institute of Organic and Physical Chemistry, FRC Kazan Scientific Center, Russian Academy of Sciences, Kazan, Russia* **CATIONIC SURFACTANTS WITH CARBAMATE FRAGMENT FOR MODIFICATION OF LIPID NANOCONTAINERS**
15:30-15:50	**Smirnova Elena Olegovna, Lantsova N. V., Iljina T. M., Toporkova Y. Y., Grechkin A. N.** *Federal Research Center «Kazan Scientific Center of Russian Academy of Sciences», Kazan, Russia* **CYP74 CLAN ENZYMES: EXPANDING HORIZONS** *Competition of reports of young scientists*	**Eshtukova-Shcheglova Elizaveta Alexandrovna, Shmendel E. V., Maslov M. A.** *Lomonosov Institute of fine Chemical Technologies, MIREA – Russian Technological University, Moscow, Russia* **TRIVALENT CARBOHYDRATE-CONTAINING LIPOCONJUGATES FOR GENE THERAPY** *Competition of reports of young scientists*

15:50-16:10	**Krivoshey Alexander Vladimirovich,** **Vrzheshch P. V.** *Lomonosov Moscow State University, Moscow, Russia* **COOPERATIVE INTERACTIONS OF ENZYME PROSTAGLANDIN H SYNTHASE WITH FATTY ACIDS**	***Distance*** **Akimov Mikhail Gennadievich,** **Gretskaya N. M., Sherstyanykh G. D., Khadur N., Bezuglov V. V.** *Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry, Russian Academy of science, Moscow, Russia* **THE ROLE OF ENDOCANNABINOIDS AND PARA-CANNABINOIDS IN MODULATING BREAST CANCER CELL APOPTOSIS**
16:10-16:30	**Sikorskaya Tatyana Vasilievna,** **Ermolenko E. V.** *A.V. Zhirmunsky National Scientific Center of Marine Biology Far Eastern Branch, RAS* **LIPIDOMIC CHANGES DURING BLEACHING AND SUBSEQUENT RECOVERY OF SYMBIOTIC CORALS** 2025 Липиды ***Competition of reports of young scientists***	
16:30-16:50	***Distance*** **Pimenov Konstantin Andreevich [1],** **Borodina A. V.[1], Velyaev Yu. O.[2]** *[1]A.O. Kovalevsky Institute of Biology of the Southern Seas of RAS, Sevastopol, Russia; [2]Sevastopol State University, Polytechnical Institute, Sevastopol, Russia* **THE CLAM *POLITITAPES AUREUS* — A SOURCE OF VALUABLE FATTY ACIDS** 2025 Липиды ***Competition of reports of young scientists***	

SEPTEMBER 10, 2025, WEDNESDAY

FREE TIME. EXCURSIONS.

19:00-23:00 | **CONFERENCE DINNER**

SEPTEMBER 11, THURSDAY

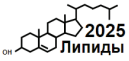
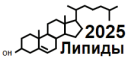
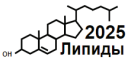
Main Conference Hall of Karelian Research Center RAS, *2nd floor*

09:30-11:30	**PLENARY SESSION. SCHOOL OF YOUNG SCIENTISTS** *Chairmans: Dr. Sci., Corresponding Member of the RAS Mikhail Gladyshev, Ph.D. Ekaterina Antonova*	
09:30-10:10	**Gladyshev Mikhail Ivanovich** *Federal Research Center "Krasnoyarsk Scientific Center of the Siberian Branch of the Russian Academy of Sciences", Institute of Biophysics of the Siberian Branch of the Russian Academy of Sciences, Krasnoyarsk, Russia*	**POLYUNSATURATED FATTY ACIDS IN TROPHIC NETWORKS OF NATURAL ECOSYSTEMS AND IN THE HUMAN DIET**
10:10-10:50	**Parnova Rimma Germanovna** *Sechenov Institute of Evolutionary Physiology and Biochemistry of the Russian Academy of Sciences (IEPhB RAS), St. Petersburg, Russia*	**MULTIFUNCTIONAL ROLE OF INTRACELLULAR LIPID DROPLETS**
10:50-11:30	**Topunov Alexey Fedorovich[1], Kosmachevskaya O. V.[1], Nasybullina E. I.[1], Khvesko K. V.[1,2]** *[1]Bach Institute of Biochemistry, Federal Research Center of Biotechnology, Russian Academy of Sciences, Moscow, Russia; [2]Mendeleev University of Chemical Technology, Moscow, Russia*	**HEMOGLOBIN INTERACTION WITH MEDMBRANE LIPIDS AT NORM AND PATHOLOGY**
11:30-11:40	Information from Organizing Committee	
11:40-12:10	**Coffee break**	

SEPTEMBER 11, THURSDAY

SECTIONAL REPORTS		
12:10-13:30	*Main Conference Hall of KarRC RAS* **Section. Role of lipids in environmental adaptations of living systems** *Chairmans: Dr. Sci. Lidia Vetchinnikova, Irina Morozova*	*Hall of the Institute of Geology* **Section. Biological membrane lipids** *Chairmans: Ph.D. Rodion Molotkovsky, Ph.D. Natalia Repkina*
12:10-12:30	**Vetchinnikova Lidia Vasilievna[1], Titov A. F.[2], Tatarinova T. D., Vasileva I. V.[3], Perk A. A.[3], Ponomarev A. G.[3]** *[1]Forest Research Institute, Karelian Research Centre, Russian Academy of Sciences, Petrozavodsk, Russian Federation; [2]Institute of Biology, Karelian Research Centre, Russian Academy of Science, Petrozavodsk, Russian Federation; [3]Institute for Biological Problems of the Cryolithozone, Siberian Branch, Russian Academy of Sciences, Yakutsk, Russian Federation* **FATTY ACID COMPOSITION OF LIPIDS IN SILVER BIRCH BUDS AND THEIR ROLE IN ADAPTATION TO OVERWINTERING CONDITIONS**	**Gifer Polina Kirillovna[1,2], Akimov S. A.[1], Kondrashov O. V.[1], Batishchev O. V.[1]** *[1]Frumkin Institute of Physical Chemistry and Electrochemistry, Russian Academy of Sciences, Moscow, Russia; [2]Moscow Institute of Physics and Technology, Dolgoprudniy, Russia* **A NEW PERSPECTIVE ON THE ELECTROPORATION OF BILAYER LIPID MEMBRANES** 2025 Липиды ***Competition of reports of young scientists***
12:30-12:50	**Morozova Irina Valerievna [1], Chernobrovkina N. P.[2]** *[1]Northern Water Problems Institute of the Karelian Research Centre of the RAS, Petrozavodsk, Russia; [2]Forest Research Institute of the Karelian Research Centre of the RAS, Petrozavodsk, Russia* **COMPOSITION OF LIPIDS FROM THE BUD PARTS OF PLANTS OF THE BETULA L. GENUS BY OPENING PHASES**	**Sumarokova Maria Vladimirovna, Pavlov R. V., Vasilenko E. O., Kozhemyakin G. L., Fedorov O. V., Molotkovsky R. Y., Bashkirov P. V.** *Research Institute for Systems Biology and Medicine (RISBM), Moscow, Russia* **THE INFLUENCE OF THE SARS-CoV-2 FUSION PEPTIDE ON THE MECHANICAL PROPERTIES OF THE LIPID MEMBRANE**
12:50-13:10	**Grabel'nykh Olga Ivanovna [1,2], Lyubushkina I. V.[1], Kirichenko K. A.[1], Korsukova A. V.[1], Rudkovskaya U. A.[2], Berezhnaya E. V.[1], Polyakova E. A.[1], Zabanova N. S.[1,2],**	**Zaripov Ilyas Ilnurovich, Zlodeeva P. D., Efimova S. S., Ostroumova O. S., Tsaplina O. A.** *Institute of Cytology of Russian Academy of Sciences, Saint Petersburg, Russia*

	Stepanov A. V.[1,2], Pobezhimova T. P.[1], Dorofeev N. V.[1] *[1]Siberian Institute of Plant Physiology and Biochemistry, Siberian Branch of the Russian Academy of Sciences, Irkutsk, Russia; [2]Irkutsk State University, Irkutsk, Russia* **TEBUCONAZOLE AND ADAPTIVE CHANGES IN THE FATTY ACID COMPOSITION OF LIPIDS AND MEMBRANE PERMEABILITY IN WINTER AND SPRING WHEAT LEAVES UNDER WATER DEFICIENCY AND SALINITY**	**INFLUENCE OF THE *SERRATIA PROTEAMACULANS* BACTERIA EXTRACELLULAR MEDIUM ON THE PERMEABILITY OF LIPID BILAYERS MIMICKING EPITHELIAL CELL MEMBRANES** 2025 Липиды ***Competition of reports of young scientists***
13:10-13:30	*Distance* **Lyubushkina Irina Viktorovna, Kirichenko K. K., Polyakova M. S., Polyanskaya I. V., Korsukova A. V., Zabanova N. S., Pobezhimova T. P., Dudareva L. V., Rihvanov E. G., Grabelnych O. I.** *Siberian Institute of Plant Physiology and Biochemistry, Siberian Branch of RAS, Irkutsk, Russia* **ACID COMPOSITION AND CONTENT IN ETIOLATED AND GREEN SEEDLINGS OF SPRING WHEAT UNDER SYNTHETIC AUXINS INFLUENCE**	*Distance* **Nurminskaya Yulia Viktorovna, Romanova I. M., Markova Yu. A.** *Siberian Institute of Plant Physiology and Biochemistry, Siberian Branch of the RAS, Irkutsk, Russia* **FATTY ACID COMPOSITION OF LIPIDS IN A NEW STRAIN OF *LYSOBACTER* SP. HZ25 FROM THE RHIZOSPHERE OF *HEDYSARUM ZUNDUKII* PESCHKOVA**
13:30-15:00	**Lunch**	
15:00-16:00	**POSTER SESSION**	
16:00-18:00	**SECTIONAL REPORTS**	
16:00-18:00	*Main Conference Hall of KarRC RAS* **Section. Role of lipids in environmental adaptations of living systems** *Chairmans: Dr. Sci. Alexander Soldatov, Ph.D. Elena Kalchenko*	*Hall of the Institute of Geology* **Section. Biological membrane lipids** *Chairmans: Ph.D. Pavel Bashkirov, Ph. D. Gulnara Gaynanova*
16:00-16:20	**Kalchenko Elena Ivanovna[1], Lozovoy A. P.[1], Popkov A. A.[2]** *[1]Kamchatka branch of the State Research Center of the Russian Federation FSBSI «VNIRO» (KamchatNIRO), Petropavlovsk-Kamchatsky, Russia; [2]Pacific branch of the State Research Center of the*	**Pinigin Konstantin Vladimirovich** *A.N. Frumkin Institute of Physical Chemistry and Electrochemistry, Russian Academy of Sciences, Moscow, Russia* **DETERMINATION OF THE ELASTIC PROPERTIES OF LATERAL DEFORMATIONS OF LIPID MEMBRANES BASED ON**

	Russian Federation FSBSI «VNIRO» (TINRO), Vladivostok, Russia **COMPOSITION OF FATTY ACIDS OF WESTERN KAMCHATKA PINK SALMON JUVENILE IN FRESHWATER AND EARLY MARINE PERIODS OF LIFE**	**THE ANALYSIS OF LOCAL PRESSURE PROFILES**  *Competition of reports of young scientists*
16:20-16:40	**Voronin Viktor Petrovich[1], Artemenkov D. V.[2], Orlov A. M.[3,4], Murzina S. A.[1]** *[1]Institute of Biology of the Karelian Research Centre of the Russian Academy of Sciences, Petrozavodsk, Russia; [2]Russian Federal Research Institute of Fisheries and Oceanography, Moscow, Russia; [3]Shirshov Institute of Oceanology of the Russian Academy of Sciences, Moscow, Russia; [4]A.N. Severtsov Institute of Ecology and Evolution of the Russian Academy of Sciences* **STUDY OF TROPHIC RELATIONSHIPS OF MESOPELAGIC FISHES OF THE NORTH ATLANTIC USING BIOMARKER FATTY ACIDS**	**Shendrikov Valery Pavlovich, Kuvakin A. S., Shkirdova A. O., Boldyrev I. A.** *Frumkin Institute of Physical Chemistry and Electrochemistry of the Russian Academy of Sciences, Moscow, Russia* **STUDY OF CONFORMATIONAL BEHAVIOR OF LIPID II AND ITS ANALOGUES**  *Competition of reports of young scientists*
16:40-17:00	**Poleshchuk Tatyana Sergeevna[1], Sultanov R. M.[2], Kasyanov S. P.[2]** *[1]Pacific State Medical University, Vladivostok, Russia; [2]A.V. Zhirmunsky National Scientific Center of Marine Biology, Far Eastern Branch, RAS, Vladivostok, Russia* **ALKYL GLYCEROL ETHERS AND THEIR ADAPTOGENIC PROPERTIES**	**Milovskaya Irina Georgievna[1], Trubitsin B.[2], Voronkov A.[1], Ivanova T.[1], Piotrovsky M.[1], Trofimova M.[1], Kuznetsov V.[1], Tikhonov A.[2], Pashkovskiy P.[1]** *[1]Timiryazev Institute of Plant Physiology, Russian Academy of Sciences, Moscow, Russia; [2]Lomonosov Moscow State University, Moscow, Russia* **COLD RESISTANCE OF *SOLANUM LYCOPERSICOIDES* IS MEDIATED BY A NOVEL MECHANISM NOT PREVIOUSLY REPORTED IN THE *SOLANACEAE* FAMILY**  *Competition of reports of young scientists*
17:00-17:20	**Coffee break**	

17:20-18:20	**SECTIONAL REPORTS**	
17:20-18:20	*Main Conference Hall of KarRC RAS* **Section. Role of lipids in environmental adaptations of living systems** *Chairmans: Dr. Sci. Alexander Soldatov, Ph.D. Elena Kalchenko*	*Hall of the Institute of Geology* **Section. Biological membrane lipids** *Chairmans: Ph.D. Pavel Bashkirov, Ph. D. Gulnara Gaynanova*
17:20-17:40	**Bindyukov Sergey Viktorovich, Baskakova Yu. A., Gershunskaya V.V.** *Russian Federal Research Institute of Fisheries and Oceanography (VNIRO), Moscow, Russia* **FATTY ACID BIOSYNTHESIS IN TISSUES OF RAINBOW TROUT *ONCORHYNCHUS MYKISS* REARED ON PLANT OIL FEEDS** ***Competition of reports of young scientists***	**Molotkovsky Rodion Yulianovich[1], Denieva Z. G.[2], Minkevich M. M.[3], Senchikhin I. N.[2], Urodkova E. K.[2], Konarev P. V.[4], Peters G. S.[4], Pavlov R. V.[1], Bashkirov P. V.[1]** *[1]Research Institute for Systems Biology and Medicine, Moscow, Russia; [2]Frumkin Institute of Physical Chemistry and Electrochemistry, Russian Academy of Sciences, Moscow, Russia; [3]IRB Barcelona, Barcelona, Spain; [4]National Research Centre "Kurchatov Institute", Moscow, Russia* **THE ENERGY TRAJECTORY OF THE FUSION OF MONOLAYER SHELLS OF LIPID DROPLETS AND THE INFLUENCE OF LIPID COMPOSITION ON THIS PROCESS**
17:40-18:00	**Egorova Alevtina Mikhailovna** *Kazan Institute of Biochemistry and Biophysics, FRC Kazan Scientific Center, Russian Academy of Sciences, Kazan, Russia* **METHYL JASMONATE-INDUCED ALTERATION OF GENE EXPRESSION IN PEA ROOTS**	**Bashkirov Pavel Viktorovich [1], Sumarokova M. V.[1], Vasilenko E. O.[1], Kuzmin P. I.[2]** *[1]Research Institute for Systems Biology and Medicine (RISBM), Moscow, Russia; [2]A.N. Frumkin Institute of Physical Chemistry and Electrochemistry (IPCE), RAS, Moscow, Russia* **CURVATURE-COMPOSITION COUPLING AS A DETERMINANT OF MEMBRANE SHAPE STABILITY AND REMODELING**
18:00-18:20	*Distance* **Zhigacheva Irina Valentinovna, Krikunova N. I.** *N.M. Emanuel Institute of Biochemical Physics, RAS, Moscow, Russia* **TEMPERATURE DEPENDENCE OF FATTY ACID COMPOSITION OF PEA SEEDLINGS MITOCHONDRIAL MEMBRANES UNDER WATER DEFICIENCY CONDITIONS**	

SEPTEMBER 12, FRIDAY

Main Conference Hall of KarRC RAS

09:00-11:00	**PLENARY SESSION** *Chairmans: Dr. Sci. Olga Ostroumova, Dr. Sci. Oleg Batishchev*	
09:00-09:30	**Dyshlyuk Lyubov Sergeevna** *Immanuel Kant Baltic Federal University, Kaliningrad, Russia*	**INFLUENCE OF COMPONENT COMPOSITION OF NUTRIENT MEDIA ON FATTY ACID COMPOSITION OF LIPIDS OF SCENEDESMUS MICROALGAE**
09:30-10:00	**Volovik M. V.[1], Krasnobaev V. D.[1], Denieva Z. G.[1], Gifer P. K.[1], Bocharov E. V.[2], Batishchev Oleg Vyacheslavovich[1]** *[1]Frumkin Institute of Physical Chemistry and Electrochemistry of the Russian Academy of Sciences, Moscow, Russia; [2]M.M. Shemyakin and Yu.A. Ovchinnikov Institute of Bioorganic Chemistry of the Russian Academy of Sciences, Moscow, Russia*	**CHOLESTEROL-DEPENDENT ACTIVATION OF TRANSMEMBRANE PROTEINS**
10:00-10:30	**Ostroumova Olga Sergeevna[1], Malykhina A. I.[1], Efimova S. S.[1], Grammatikova N. E.[2], Tevyashova A. N.[2,3], Shchekotikhin A. E.[2]** *[1]Institute of Cytology of the Russian Academy of Sciences, Saint Petersburg, Russia; [2]Gause Institute of New Antibiotics, Moscow, Russia; [3]School of Science, Constructor University, Bremen, Germany*	**LIPOSOMAL FORMS OF ECHINOCANDINS INCREASE THE PERMEABILITY OF ERGOSTERIN-RICH MEMBRANES AND ARE CHARACTERIZED BY INCREASED ACTIVITY AGAINST MULTI-RESISTANT CANDIDA SPP**
10:30-11:00	**Coffee break**	

SEPTEMBER 12, FRIDAY

SECTIONAL REPORTS		
11:00-12:20	*Main Conference Hall of KarRC RAS* **Section. Novel lipid-based drugs** *Chairmans: Dr. Sci. Tatyana Novgorodtseva, Ph.D. Irina Zhavoronok*	
11:00-11:20	**Novgorodtseva Tatyana Pavlovna, Kovalenko I. S., Bocharova N. V.** *Vladivostok Branch of Far Eastern Scientific Center of Physiology and Pathology of Respiration - Institute of Medical Climatology and Rehabilitative Treatment, Vladivostok, Russia*	**N-3 FATTY ACID ETHANOLAMIDES IN THE REGULATION OF SYSTEMIC INFLAMMATION IN BRONCHIAL ASTHMA**
11:20-11:40	**Zhavoronok Irina Petrovna[1], Shchastnaya N. I.[1], Doronkina A. S.[1], Antipova O. A.[1], Rudak A. A.[1], Haurylchyk A. R.[1], Pasliadovich L. D.[1], Mikhalchuk A. L.[2]** *[1]Institute of physiology of the National Academy of Sciences of Belarus, Minsk, Republic of Belarus; [2]Institute of bioorganic chemistry of the National Academy of Sciences of Belarus, Minsk, Republic of Belarus*	**EFFECTIVENESS OF FATTY ACID AMIDES AND ITS COMPOSITIONS FOR CORRECTION OF EXPERIMENTAL NEUROPATHIES AND ARTHRITIS**
11:40-12:00	**Gorshkova Julia Evgenievna[1,2]** *[1]Joint Institute for Nuclear Research, Dubna, Russia; [2]Institute of Physics, Kazan Federal University, Kazan, Russia*	**BIOHYBRID NANOCOMPLEXES BASED ON BIOMIMETIC MEMBRANES FROM SOY LECITHIN, SILVER NANOPARTICLES AND CHITOSAN WITH ANTIMICROBIAL AND ANTI-CANCER ACTIVITIES**
12:00-12:20	**Ercan OKTAN[1]*, Öznur ÖZKAN[2], Neslihan ATAR[3]** *[1]Karadeniz Technical University, Faculty of Forestry, Department of Forestry Engineering, Trabzon, Türkiye;* *[2], [3]Artvin Coruh University Faculty of Forestry Department of Forestry Engineering, Artvin, Türkiye*	**PHARMACEUTICAL APPLICATIONS OF ARONIA (*ARONIA MELANOCARPA*) LIPIDS: AN REVIEW IN TERMS OF BIOAVAILABILITY AND SUSTAINABILITY**
12:20-13:40	*Main Conference Hall of KarRC RAS* **Section. Synthetic and analytical lipid chemistry** *Chairmans: Dr. Sci. Topunov Alexey, Ph.D. Svetlana Khurtina*	
12:20-12:40	**Kislova Svetlana Olegovna[1], Shkirdova A. O.[1], Myasnyanko I. N.[2,3], Volynsky P. E.[2], Boldyrev I. A.[1]** *[1]Frumkin Institute of Physical Chemistry and Electrochemistry, Russian Academy of Sciences, Russia; [2]Shemyakin–Ovchinnikov Institute of Bioorganic Chemistry, Russian*	**AGGREGATION OF N-ALKYLUREAS IN NON-POLAR MEDIUM: ROLE OF AMIDE GROUPS IN REVERSE MICELLE FORMATION**

	Academy of Sciences, Russia; [3]*Institute of Translational Medicine, Pirogov Russian National Research Medical University, Russia*	*Competition of reports of young scientists*
12:40-13:00	**Ryzhov Ivan Mikhailovich, Rapoport E. M., Tuzikov A. B., Sokolova M. S., Zubricheva V. A., Bovin N. V.** *Shemyakin-Ovchinnikov Institute of Bioorganic Chemistry of the Russian Academy of Sciences, Moscow, Russia*	**SYNTHETIC LIPOPHILIC CONSTRUCTS AS INSTRUMENT FOR MODIFICATION OF LIPID MEMBRANE. INFLUENCE OF STRUCTURE ON GLYCAN PRESENTATION**
13:00-13:20	**Pavlov Rais Valerievich**[1], **Sumarokova M. V.**[1], **Nosov D. L.**[1], **Molotkovsky R. Yu.**[1], **Romanova E. A.**[2], **Gaynanova G. A.**[2], **Zakharova L. Ya.**[2], **Bashkirov P. V.**[1] [1]*Research Institute for Systems Biology and Medicine, Moscow, Russia;* [2]*Arbuzov Institute of Organic and Physical Chemistry, FRC Kazan Scientific Center, Russian Academy of Sciences, Kazan, Russia*	**CONTROL OF STRUCTURAL INTEGRITY OF MEMBRANE ARCHITECTURES BASED ON POLYMERIZABLE LIPIDS** *Competition of reports of young scientists*
13:20-13:40	*Distance* **Galkina Olga Vyacheslavovna**[1], **Zorina I.**[1,2], **Eschenko N.**[1] [1]*St. Petersburg State University, Faculty of Biology, Department of Biochemistry, St. Petersburg, Russia;* [2]*Sechenov Institute of Evolutionary Physiology and Biochemistry, Russian Academy of Science, St. Petersburg, Russia*	**ANTIRADICAL AND ANTIOXIDANT PROPERTIES OF ESTROGENS ANALOGUES *IN VITRO* AND *IN VIVO***
13:40-15:00	**Lunch**	
15:00-16:20	*Main Conference Hall of KarRC RAS* **Section. Role of lipids in environmental adaptations of living systems** *Chairmans: Dr. Sci. Olga Grabel'nykh, Ph.D. Viktor Voronin*	
15:00-15:20	**Islamova Renata Tagirovna, Krylova E. A., Shelenga T. V.** *N. I. Vavilov All-Russian Institute of Plant Genetic Resources (VIR), St. Petersburg, Russia*	**THE INFLUENCE OF CONTRASTING AIR HUMIDITY CONDITIONS ON THE ACCUMULATION OF PRECURSORS OF JASMONATE SIGNALING** *Competition of reports of young scientists*
15:20-15:40	**Manoilova Diana Ilyinichna, Murzina S.A., Khurtina S.N., Voronin V.P., Efremov D.A., Nemova N.N.**	**COMPARATIVE ANALYSIS OF THE LIPID SPECTRUM OF EVEN-LINE PINK SALMON (ONCORHYNCHUS GORBUSCHA) SMOLTS FROM THE**

	Institute of Biology of the Karelian Research Centre of the Russian Academy of Sciences, Petrozavodsk, Russia	**INDERA RIVER (WHITE SEA BASIN)** 2025 Липиды ***Competition of reports of young scientists***
15:40-16:00	*Distance* **Vlasova Tatyana Anatolyevna,** **Ageeva I. V.** *Moscow State Lomonosov-University, Fac. of Biology, Moskow, Russia*	**THE PARTICIPATION OF LIPIDS OF PHYTOPATHOGENIC FUNGUS IN THE INFECTION PROCESS AND IN PROTECTIVE FUNCTIONS WHEN EXPOSED TO A TOXICANT**
16:00-16:30	**CLOSING OF THE CONFERENCE**	
16:30-16:50	**Farewell coffee break**	

POSTER SESSION

1.	**Amigud Ekaterina Yaroslavna[1*], Senik S. V.[1], Kotlova E. R.[1], Serebryakov E. B.[2], Kirtsideli I. Yu.[1]** **MOLECULAR PROFILE OF BASIDIAL YEAST PHOSPHOLIPIDS *RHODOTORULA DIOBOVATA* (S.Y. NEWELL & I.L. HUNTER)** *[1]Komarov Botanical Institute of the Russian Academy of Sciences, RAS, St. Petersburg, Russia; [2]Chemical Analysis and Materials Research Centre, St. Petersburg State University, Peterhof, Russia* **e-mail: ekamigud@gmail.com* *Competition of reports of young scientists*
2.	**Antonova Ekaterina Petrovna[1*], Morozov A. V.[1], Ilyukha V. A.[2,3], Belkin V. V.[1], Khizhkin E. A.[1]** **SEASONAL CHANGES IN BODY MASS AND ACTIVITY OF DIGESTIVE ENZYMES IN BATS DURING HIBENTION** *[1]Institute of Biology of the Karelian Research Centre of the Russian Academy of Sciences, Petrozavodsk, Russia; [2]Petrozavodsk State University, Petrozavodsk, Russia; [3]Papanin Institute for Biology of Inland Waters, Russian Academy of Sciences Borok, Russia* **e-mail: antonova88ep@mail.ru*
3.	**Baskakova Yu. A., Shulgina E. V., Gershunskaya Valeria Vladimirovna[*]** **FATTY ACID COMPOSITION IN TISSUES OF HATCHERY-REARED CHINOOK SALMON JUVENILES ON VARIOUS COMPOUND FEEDS** *Russian Federal Research Institute of Fisheries and Oceanography (VNIRO), Moscow, Russia* **e-mail: gershunskaya@vniro.ru*
4.	**Batova Yulia Valerievna, Repkina N. S.[*], Murzina S. A., Voronin V. P., Ikkonen E. N.** **EFFECT OF METHYL JASMONATE PRETREATMENT ON GENE EXPRESSION OF DESATURASE IN WHEAT SEEDLINGS LEAVES UNDER OPTIMAL GROWTH CONDITIONS AND UNDER THE CADMIUM IMPACT** *Institute of Biology of the Karelian Research Centre of the Russian Academy of Sciences (IB KarRC RAS), Petrozavodsk, Russia* *[*]e-mail: nrt9@ya.ru*
5.	**Valeeva Farida Garafeevna[*], Romanova E. A., Kuznetsov D. M., Zakharova L. Ya.** **CATIONIC TRANSFERSOMES BASED ON LIPIDS AND AMPHIPHILIC DERIVATIVES OF 1,4-DIAZABICYCLO[2.2.2]OCTANE FUNCTIONALIZED WITH ESTER GROUPS** *Arbuzov Institute of Organic and Physical Chemistry, FRC Kazan Scientific Center, Russian Academy of Sciences, Kazan, Russia* **e-mail: valeevaf@iopc.ru*
6.	**Ermolenko Ekaterina Vladimirovna*, Sikorskaya T. V., Grigorchuk V. P., Gevorgyan T. A., Maslennikov S. I.** **CHANGES IN THE PROFILE OF MOLECULAR SPECIES OF STRUCTURAL AND STORAGE LIPIDS DURING LARVAL DEVELOPMENT OF RED KING CRAB (*PARALITHODES CAMTSCHATICUS*) AND JAPANESE MITTEN CRAB (*ERIOCHEIR JAPONICA*)**

	A.V. Zhirmunsky National Scientific Center of Marine Biology, Far Eastern Branch of the Russian Academy of Sciences, Vladivostok, Russia **e-mail: ecrire_711@mail.ru*
7.	**Zavolskova Marina Dmitrievna*, Senko D. A., Khaitovich P. E.** **STABILITY OF LIPIDS AND POLAR METABOLITES IN POSTMORTAL BRAIN TISSUE** *Skolkovo Institute of Science and Technology, Moscow, Russia* **e-mail: marina.zavolskova@skoltech.ru* ***Competition of reports of young scientists***
8.	**Zykova Daria Dmitrievna[1,2*], Konstantinova A. N.[2], Sokolov V. S.[2]** **LIPID PORES IN MEMBRANE FORMED BY INCORPORATION INTO IT OF AGGRAGATES OF ZINK PHTHALOZYANINE** *[1]Moscow Institute of Physics and Technology (National Research University), Dolgoprudny, Moscow Region, Russia; [2]A.N. Frumkin Institute of Physical Chemistry and Electrochemistry, Moscow, Russia* **e-mail: dasha_ddz1924@mail.ru* ***Competition of reports of young scientists***
9.	**Ivanova Valentina Petrovna*** **EFFECT OF THE TETRAPEPTIDE FRAGMENT OF α_2-MACROGLOBULIN ON THE FATTY ACID COMPOSITION OF PHOSPHOLIPIDS IN CELL MEMBRANES** *Sechenov Institute of Evolutionary Physiology and Biochemistry of the RAS, St. Petersburg, Russia* **e-mail: valet@iephb.ru*
10.	**Kerbitskaya Maria Dmitrievna*, Shmendel E. V., Yakovlev O. A., Puchkov P. A., Maslov M. A.** **THE EFFECT OF HELPER LIPIDS ON THE PHYSICO-CHEMICAL CHARACTERISTICS OF CATIONIC LIPOSOMES AND THEIR COMPLEXES WITH mRNA** *Lomonosov Institute of Fine Chemical Technologies, MIREA-Russian Technological University, Moscow, Russia* **e-mail: mariyakerbitskaya2001@mail.ru* ***Competition of reports of young scientists***
11.	**Kuznetsov Denis Mikhailovich*, Romanova E. A., Vasileva L. A., Gaynanova G. A., Zakharova L. Ya.** **MEMBRANOTROPIC PROPERTIES OF AMPHIPHILIC DERIVATIVES OF 1,4-DIAZABICYCLO[2.2.2]OCTANE WITH AN ESTER FRAGMENT** *Arbuzov Institute of Organic and Physical Chemistry, FRC Kazan Scientific Center, Russian Academy of Sciences, Kazan, Russia* **e-mail: kuznetsov_denis91@mail.ru* ***Competition of reports of young scientists***
12.	**Kuznetsova Maria Viktorovna*, Rodin M. A., Krupnova M. Yu., Kuritsyn A. E., Murzina S. A., Nemova N. N.** **ENERGY, CARBOHYDRATE, AND LIPID METABOLISM IN ATLANTIC**

	SALMON *SALMO SALAR* L. UNDER DIFFERENT LIGHTING REGIME *Institute of Biology of the Karelian Research Centre of the RAS, Petrozavodsk, Russia* **e-mail: kuznetsovamvi@yandex.ru*
13.	**Makarenko Maria Andreevna*, Malinkin A. D.** **SOLID PHASE MICROEXTRACTION COUPLED TO GC-MS/FID FOR MEASURING VOLATILE ALDEHYDES IN REFINED EDIBLE OILS USING STANDARD ADDITION METHOD** *Federal State Budgetary Scientific Institution "Federal Research Centre of Nutrition, Biotechnology and Food Safety", Moscow, Russia* **e-mail: dragon.soul1992@ya.ru* *Competition of reports of young scientists*
14.	**Manzhieva Bayrta Sanalovna[1]*, Senik S. V.[1], Frolova D. A.[2], Hakulova A. A.[2], Kotlova E. R.[1]DETERMINATION OF STRUCTURAL HETEROGENEITY OF PHOSPHOLIPIDS IN ONTOGENESIS OF THE BASIDIOMYCETE FLAMMULINA VELUTIPES BY LIPIDOMICS METHODS** *[1]Komarov Botanical Institute of the Russian Academy of Sciences, Saint Petersburg, Russia* *[2]Resource Center "Methods of Analysis of the Composition of Substances" of Saint Petersburg State University, Saint Petersburg, Russia* **e-mail: bmanzhieva@binran.ru* *Competition of reports of young scientists*
15.	**Milagina Svetlana Viktorovna*, Puchkov P. A., Maslov M. A.** **DEVELOPMENT OF NEW CATIONIC LIPOSOMES BASED ON DISULFIDE POLYCATIONIC AMPHIPHILE FOR mRNA DELIVERY** *Lomonosov Institute of fine Chemical Technologies, MIREA – Russian Technological University, Moscow, Russia* **e-mail: milagina.s.v@yandex.ru* *Competition of reports of young scientists*
16.	**Morozov Artem Vladimirovich[1]*, Antonova E. P.[1], Vinogradova I. A.[2]** **INFLUENCE OF LIGHT REGIMES, MELATONIN AND EPITHALONE ON AGE-RELATED CHANGES IN LIPOLYTIC ACTIVITY IN RATS** *[1]Institute of Biology of the Karelian Research Centre of the RAS, Petrozavodsk, Russia; [2]Petrozavodsk State University, Petrozavodsk, Russia* **e-mail: artem.morozow@yandex.ru*
17.	**Naumov Evgeniy Igorevich[1]*, Bayramukov V. Y.[1,2], Filatov N. A.[1], Bukatin A. S.[1]** **THE INFLUENCE OF DRYING ON MECHANICAL PROPERTIES OF DOTAP:DOPE:CHOLESTEROL LIPOSOMES SYNTHESISED WITH MICROFLUIDICS AND STUDIED USING ATOMIC FORCE MICROSCOPY** *[1]Saint Petersburg State Academic University, Saint Petersburg, Russia;* *[2]Petersburg Nuclear Physics Institute named by B.P. Konstantinov of NRC "Kurchatov Institute", Saint Petersburg, Russia*

	**e-mail: naumove2000@gmail.com* *Competition of reports of young scientists*
18.	**Prokopeva Ekaterina Ivanovna*, Eshtukova-Shcheglova E. A., Maslov M. A.** **MANNOSYLATED TARGETED LIPOCONJUGATES FOR GENE THERAPY** *Lomonosov Institute of Fine Chemical Technologies, MIREA – Russian Technological University, Moscow, Russia* **e-mail: prokopevakaty.2003@gmail.com* *Competition of reports of young scientists*
19.	**Repkina Natalia Sergeevna*, Voronin V. P., Antonova E. P., Batova Yu. V., Murzina S. A.** **LIPID AND FATTY ACID PROFILE OF *BRASSICA JUNCEA* (L.) CZERN SEEDS GROWN UNDER ZINC POLLUTION AND ASSESSMENT OF THE POSSIBILITY OF THEIR USE FOR OIL PRODUCTION** *Institute of Biology of the Karelian Research Centre of the Russian Academy of Sciences (IB KarRC RAS), Petrozavodsk, Russia* **e-mail: nrt9@ya.ru*
20.	**Sokolov Valery Sergeevich[1*], Konstantinova A. N.[1], Zykova D. D.[1,2], Efimova I. A.[1], Vatischev O. V.[1]** **ELECTROSTATIC POTENTIALS ON THE BOUNDARIES OF LIPAYER LIPID MEMBRANES DUE BINDING AND TRANSPORT OF PHOSPHORUS COMPLEXES OF PORPHYRIN** *[1]A.N. Frumkin Institute of Physical Chemistry and Electrochemistry, Moscow, Russian Federation; [2]Moscow Institute of Physics and Technology (National Research University), Dolgoprudny, Moscow Region, Russian Federation* **e-mail: sokolovvs@mail.ru*
21.	**Tashkin Vsevolod Yuryevich[1*], Zykova D. D.[1,2], Pozdeeva L. Ye.[3], Sokolov V. S.[1]** **KINETIC OF PROTONATION OF THE BILAYER LIPID MEMBRANE BY THE PHOTOACTIVATED COMPOUNDS** *[1]A.N. Frumkin Institute of Physical Chemistry and Electrochemistry, Moscow, Russian Federation; [2]Moscow Institute of Physics and Technology (National Research University), Dolgoprudny, Moscow Region, Russian Federation; [3]Lomonosov Moscow State University, Moscow, Russian Federation* **e-mail: vse_tash@mail.ru* *Competition of reports of young scientists*
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