



PROGRAM
XIII International Scientific and Practical Conference
for Young Scientists and Specialists

**CONTEMPORARY ISSUES AND LONG-TERM
DEVELOPMENT OF THE FISHERIES INDUSTRY**



organized by the Polar Branch of VNIRO in Murmansk, Russia,
9–10 October 2025

Conference Organizing Committee

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A.V. Dolgov, D.Sc. (Biology), Chief Scientist, Laboratory of Hydrobiology, Environmental Monitoring Center, Polar Branch of FSBSI “VNIRO”

AGENDA

Time limit for speeches: 10 minutes.

Time limit for questions: 5 minutes.

09-10 October

**Polar Branch of the State Scientific Center of the Russian Federation
FSBSI “VNIRO”**

(“PINRO” named after N.M. Knipovich)

**6 Academician Knipovich St., Murmansk, Russia
Conference Hall**

Chairman **Konstantin Sokolov**, Ph.D. (Biology), Acting Head, Polar Branch
of the State Scientific Center of the Russian Federation FSBSI
“VNIRO”

Opening of the Conference

9 October

Sign-in of participants: 9.30 – 10.00

Proceedings: 10.00

Opening statement

Konstantin Sokolov,
Polar Branch of FSBSI “VNIRO”, Murmansk

Contributions of the rising generation and ecosystem approach to increasing human capital assets in the fisheries industry

Ekaterina Seromakha
FSBSI “VNIRO”, Moscow

Characteristics of the phenology of the spring phytoplankton bloom in the Bering Sea

Alexandra Malysheva^{1,2}
K.K. Kivva¹
¹*FSBSI “VNIRO”, Moscow*
²*Lomonosov Moscow State University, Moscow*

Sea-and-atmosphere interactions: The impact of heat exchange and advection on the Barents Sea climate

Alexandra Sumkina¹,
V.V. Ivanov^{2,3}, K.K. Kivva¹
¹*FSBSI “VNIRO”, Moscow*

²*Lomonosov Moscow State University, Moscow*
³*The Arctic and Antarctic Research Institute, St. Petersburg*

Frontal zones and commercial aggregations of mackerel in the South Kuril fishing area

Maksim Budyanskiy^{1,2}
M.A. Lebedeva^{1, 2}, T.V. Belonenko¹, P.A. Fayman^{1,2}, A.A. Didov^{1,2}, M.Yu. Uleyskiy²
¹*Saint Petersburg State University, St. Petersburg*
²*V.I. Il'ichev Pacific Oceanological Institute of the Far Eastern Branch of RAS, Vladivostok*

Break (15 minutes)

Cuprum and chromium contents in bottom sediments of the Barents Sea

Arina Meshcheryakova^{1,2}
M.A. Novikov^{1,2}, M.N. Kharlamova²
¹*Polar Branch of FSBSI "VNIRO", Murmansk*
²*Murmansk Arctic University, Murmansk*

Studies on microplastic pollution in the coastal areas of St. Petersburg: The relations between marine litter and atmospheric precipitation (online)

German Muratov¹
A.P. Pedchenko²
¹*Saint Petersburg National Research University of Information Technologies, Mechanics and Optics, Saint Petersburg*
²*FSBSI "VNIRO", Moscow*

Microbiological studies of Lake Ilmen in 2025

Maria Isachenko¹
A.A. Bystrova^{1,2}, S.A. Dyakova¹
¹*St. Petersburg Branch of FSBSI "VNIRO", St. Petersburg*
²*Novgorod Branch of FSBSI "VNIRO", Veliky Novgorod*

Some results from microbiological studies on inland water bodies in the Murmansk region in 2025

Diana Basangova
M.N. Kharlamova
Murmansk Arctic University, Murmansk

Dominant abundant phytoplankton species in Lake Beloye (Vologda Region) during the water bloom in 2016–2023.

Nadezhda Makarenkova
Vologda Branch of FSBSI "VNIRO", Vologda

Features of the spatial and temporal dynamics of pigment characteristics of phytoplankton species in the confluence area of the Oka and Volga Rivers

Dmitry Mushakov ^{1,2}

¹*Nizhny Novgorod Branch of FSBSI “VNIRO”, Nizhny Novgorod*

²*N.I. Lobachevsky State University of Nizhny Novgorod, Nizhny Novgorod*

Lunch: 13:15 - 14:15

Production and use of structured hydrolysate from common carp (*Cyprinus carpio* Linnaeus, 1758) byproducts (online)

Nikita Alexandrov

Alshevsky D.L., Korzhavina Yu.N., Belova M.P.
Kaliningrad State Technical University, Kaliningrad

Recent developments in processing technology for sturgeon caviar food products (online)

Natalia Kharchenko

Volga-Caspian Branch of Russian Federal Research Institute of Fisheries and Oceanography (“CaspNIRKH”), Astrakhan

Alternative preservation method for *Fucus vesiculosus* and *Ascophyllum nodosum*: their utilization as food products

Anna Roschina,

Podkorytova A. V.

Russian Federal Research Institute of Fisheries and Oceanography (VNIRO), Moscow

Saccharina japonica and *Strongylocentrotus intermedius* community in Nevelskoy Bay (Sakhalin Island)

Artem Parfentyev

Prokhorova N.Y.

Sakhalin Branch of Russian Federal Research Institute of Fisheries and Oceanography (“SakhNIRO”), Yuzhno-Sakhalinsk

Development of polychaete worms of the genus *Marenzelleria* (Polychaeta, Spionidae) in the Northern Caspian Sea

Elena Minakova,

Zhatkina O.V., Kashin R.D.

Volga-Caspian Branch of Russian Federal Research Institute of Fisheries and Oceanography (“CaspNIRKH”), Astrakhan

Zoobenthos in shallow waters of Kanin Bank

Daria Blinova

Rolskaya K.S., Manushin I.E., Vyaznikova V.S., Kudryashova A.S.
Polar Branch of FSBSI “VNIRO” (“PINRO” named after N.M.Knipovich), Murmansk

Break (15 minutes)

Caddisfly fauna of the cooling pond of Tyumen Combined Heat and Power Plant (CHP-1) (online)

Aleksey Gerasimov¹

A.A. Gerasimova², T.A. Sharapova²

¹*Tyumen Branch of Russian Federal Research Institute of Fisheries and Oceanography (“Gosrybcenter”), Tyumen*

²*Tyumen Scientific Center of the Siberian Branch of the Russian Academy of Sciences, Tyumen*

Comprehensive approach to assessing red king crab distribution in the Barents Sea

Daria Blinova

Bakanev S.V., Lukin N.N.

Polar Branch FSBSI “VNIRO” (“PINRO” named after N.M.Knipovich), Murmansk

Pre-spawning broodstock conditioning and spawning of narrow-clawed crayfish *Pontastacus leptodactylus* Eschscholtz, 1823 under artificial conditions (online)

Timofey Shramko,

Kuznetsov V.K., Polin A.A.

Azov-Black Sea Branch of Russian Federal Research Institute of Fisheries and Oceanography (“AzNIIRKH”), Rostov-on-Don

Production and rearing of juvenile giant freshwater prawn *Macrobrachium rosenbergii* (De Man, 1879) in Southern Russia (online)

Vladislav Kuznetsov,

Polin A.A.

Azov-Black Sea Branch of Russian Federal Research Institute of Fisheries and Oceanography (“AzNIIRKH”), Rostov-on-Don

Feed selection for rearing Australian red claw crayfish in recirculating aquaculture systems

Anastasia Ivanova

Sherstyuk E.S., Kravets P.P.

Murmansk Arctic University, Murmansk

Distribution of abundant jellyfish species in the northwestern Pacific Ocean in summer 2025

Elizaveta Antonenkova

Pacific Branch of Russian Federal Research Institute of Fisheries and Oceanography (“TINRO”), Vladivostok

10 October

Meeting start time — 10:00 a.m.

The Influence of Signaling Pathways on the Growth Cycle of *Mytilus coruscus* (online)

Xinyu Zhao

Xiangli Dong

Zhejiang Ocean University, Zhoushan, Zhejiang Province, China

Analysis of the Impact of Microplastic Pollution on the Virus-Mediated Toxicological Responses in Bivalve Mollusks (online)

Haiping Ma

Xiangli Dong

*National Engineering Research Center for Marine Aquaculture,
Zhejiang Ocean University, Zhoushan, Zhejiang Province, China*

Haplotypic diversity of sharpbelly *Hemiculter leuciscus* (Basilewsky, 1855) in the southern Russian Far East based on mtDNA cox1 gene data (online)

Konstantin Vainutis¹

Shapovalov M.E.², Voronova A.N.³, Maksimov R.A.¹, Zyumchenko N.E.⁴

¹*Far Eastern State Technical Fisheries University, Vladivostok*

²*Pacific Branch of Russian Federal Research Institute of Fisheries and Oceanography
("TINRO"), Vladivostok*

³*Pacific State Medical University, Vladivostok*

⁴*Far Eastern Federal University, Vladivostok*

Cultivation of African catfish in recirculating aquaculture systems as a prospective aquaculture species in Murmansk Oblast

Alexandra Abrashkina

Abraskin A.V., Kravets P.P.

Murmansk Arctic University, Murmansk

Biotechniques for breeding and rearing sterlet (*Acipenser ruthenus*) at Kuban Institute of Sturgeon Breeding LLC (online)

Andrey Lebedev

Omelchenko V.A.

*Azov-Black Sea Branch of Russian Federal Research Institute of Fisheries and
Oceanography ("AzNIIRKH"), Krasnodar*

Identification of sterlet from the Northern Dvina River basin by genetic markers

Victoria Shcherbakova

Barmintseva A.E., Myuge N.S.

Russian Federal Research Institute of Fisheries and Oceanography (VNIRO), Moscow

Break (15 minutes)

Genetic characteristics of even-year and odd-year pink salmon: similarities and differences

Valeria Soshnina¹

Zelenina D. A.¹, Gordeev I. I.^{1,2}, Myuge N.S.^{1,3}

¹*Russian Federal Research Institute of Fisheries and Oceanography (VNIRO), Moscow*

²*Lomonosov Moscow State University, Moscow*

³*Koltsov Institute of Developmental Biology of the Russian Academy of Sciences (IBR RAS), Moscow*

Vaccination as a method for vibriosis control: analysis of existing vaccines and prospects for developing new ones

Tatiana Komogortseva

Rudakova S.L., Plakun L.K.

Russian Federal Research Institute of Fisheries and Oceanography (VNIRO), Moscow

Mathematical modeling of physicommechanical properties of filamentous fishing materials (*online*)

Pavel Nasenkov

Kaliningrad State Technical University, Kaliningrad

CAD, CAE and CAM of trawl doors (*online*)

Alexander Pivovarov

Nedostup A.A.

Kaliningrad State Technical University, Kaliningrad

3D modeling of a fishing catamaran based on WYATBOAT-430 boats (*online*)

Egor Sergeev

Nedostup A.A.

Kaliningrad State Technical University, Kaliningrad

Discussion of reports

Summing up