

PRELIMINARY PROGRAM

The 5th Russia–China Marine Science Symposium

“Oceanic Processes and Climate Change: From Past to Future”

November 23–25, 2026, Vladivostok, Russia

Organizers:

- V.I. Il’ichev Pacific Oceanological Institute, Far Eastern Branch, Russian Academy of Sciences, Russia
- First Institute of Oceanography, Ministry of Natural Resources, China

Venue: Azimut Hotel Vladivostok, Conference Room “Vladivostok”, 2nd floor
Address: No. 10 Naberezhnaya street, Vladivostok

Working language: English

Please note that this program is preliminary and subject to change. The final schedule, list of speakers, and session titles will be published in the second circular.

- **DAY 1, NOVEMBER 23 (MONDAY)**
- **09:00 – 10:00 Participant Registration and Welcome Coffee**
- **10:00 – 10:50 Opening Ceremony**
- **Welcome addresses by representatives of the Organizing Committee (Russia, China)**

1. Director, V.I. Il'ichev Pacific Oceanological Institute (POI FEB RAS) **Dr. Charkin Alexandr**

2. Deputy Director, First Institute of Oceanography (FIO MNR P.R. CHINA) **Prof. Xu Xingyong**

- **Greeting from:**
- Representative of the Ministry of Science and Higher Education of the Russian Federation
- First Deputy Head of the Vladivostok City Administration
- Head of the Ministry of International and Foreign Economic Relations of the Primorsky Krai Administration
- Chairman of the Presidium of the Far Eastern Branch of the Russian Academy of Sciences
- Representative of the Chinese Consulate General in Vladivostok
- Representative of the Ministry of Natural Resources of the P.R. China
- **Official group photograph of the attendees**

10:50–12:30 Plenary Session

10:50–11:20 Gorbarenko Sergey — Orbital and millennial-scale changes in North Pacific Intermediate Water formation over the past 130 kyr: individual input of the Okhotsk and Bering seas

11:20–11:40 Zou Jianjun — Synchronous changes of respired carbon storage in the subtropical North Pacific and atmospheric CO_2 during the last deglaciation

11:40–12:00 Yao Zhengquan — Orbital and millennial variations in wildfires in the East Siberian Arctic Shelf since the Late Quaternary

12:00–12:30 Prants Sergei — Mesoscale eddies in the Bering Sea over a 32-year period: census, hotspots, physical properties and generation mechanisms

12:30–13:00 Coffee Break

Section 1: Physical Oceanography, Climate Change and Ecosystem Dynamics

Moderators: Lobanov Vyacheslav, Liu Guimei / Conference Hall "Vladivostok"

13:00–13:20 Lobanov Vyacheslav — Ventilation of the Japan Sea bottom water

13:20–13:40 Li Xiaojing — Contribution of RAMA observations to seasonal predictions of tropical SSTA

13:40–14:00 Semkin Pavel — New nutrients for the Pacific Ocean delivered from the rivers related to volcanic activity of the Kamchatka Peninsula

14:00–14:20 Li Teng — Stock-based satellite approach for estimating the vertical POC export flux

14:20–14:40 Chupin Vladimir — Numerical modeling of storm surges in Peter the Great Bay: model development and validation during Typhoon Maysak (2020)

14:40–15:00 Liu Changjian — Winter eddy activities in the northern South China Sea

15:00–15:20 Stepanov Dmitrii — Enhanced vertical mixing induced by mesoscale eddies and tropical cyclone in the northwestern Sea of Japan: fine-scale measurements and numerical simulations

15:20–15:40 Coffee Break

Moderators: Kilmatov Talgat, Liu Changjian

15:40–16:00 Liu Guimei — Operational ecosystem forecasting systems in the China seas

16:00–16:20 Kilmatov Talgat — Entropy flux through the surface of the ocean–atmosphere as an indicator of climate change

16:20–16:40 Zheng Jingjing — Vertical structures of marine heatwaves and their impacts on primary production in the South China Sea

16:40–17:00 Ponomarev Vladimir — Climate oscillations and global climate regime change during the period from 1970 to 2023

17:00–17:20 Yurikova Ekaterina — Sympagic flora of Amur Bay of the Sea of Japan

17:20–17:40 Dementev Nikolai — Submesoscale processes in the waters of the Kuril Islands

17:40–18:00 Kalinchuk Viktor — Atmospheric mercury over the Russian Arctic shelf seas in autumn: spatial patterns, air-mass sources and preliminary sea–air exchange estimates

18:00–18:20 Pichugin Mikhail — Performance of atmospheric reanalyses in reproducing tropical cyclones entering the Sea of Japan

<u>DAY 2 — TUESDAY, NOVEMBER 24, 2026</u>

9:00–9:30 Welcome Coffee, Registration of Participants

Section 1: Physical Oceanography, Climate Change and Ecosystem Dynamics

/ Conference Hall "Vladivostok» (continued)

Moderators: Stepanov Dmitrii, Gu Haifeng

9:30–9:50 Khudyakova Sofia — One system, many seas: operational sea ice forecasting in the eastern Russian Arctic seas with NEMO-SI3

9:50–10:10 Salyuk Pavel — Study of hydrodynamic structures and river plumes in the seas of the northwestern Pacific as a basis for validating satellite and model data: the role of autonomous profilers and shipborne research

10:10–10:30 Lebedeva Maria — Ring-facilitated cross-jet water transport in the Kuroshio Extension: observations and Lagrangian simulations

10:30–10:50 Gu Haifeng — The suppression of harmful algal blooms in spring 2025 off the Zhe-Min coast, China: a consequence of extreme atmospheric and oceanic forcing

Section 2: Paleoceanography and Paleoclimatology / Conference Hall «Vladivostok»

Moderators: Bosin Alexandr, Yao Zhengquan

11:00–11:20 Syrbu Nadezhda — Natural gas seepage in the transitional zones of the NW Pacific: methane fluxes, gas hydrate destabilization, and climate implications

11:20–11:40 Dong Zhi — Revisiting Holocene North Pacific Intermediate Water ventilation through the lens of radiolarian morphometric analysis

11:40–12:00 Sattarova Valentina — Geochemical and micropaleontological features of deep-sea sediments of the Kuril–Kamchatka and western Aleutian trench region (northwestern Pacific)

12:00–12:20 Dong Jiang — A positive trend in the Arctic Oscillation during the Holocene driven by rising CO_2

12:20–12:40 Vasilenko Lidiya — Assemblages of tintinnid ciliates and testate amoebae in the bottom sediments of the Laptev Sea shelf: their ecology and significance for paleoreconstructions

12:40–13:00 Dou Ruxi — Dust variations in the western North Pacific dominated by the East Asian Monsoon

13:00–13:30 Coffee Break

Moderators: Vasilenko Yurii, Zou Jianjun

13:30–13:50 Derkachev Alexander — Supplying provinces of ice-rafted debris in the Bering Sea and NW Pacific (inferred from heavy mineral compositions)

13:50–14:10 Yin Zhengxin — Growth processes and genesis of ferromanganese nodules in the northwestern Indian Ocean: implications for bottom water evolution

14:10–14:30 Vasilenko Yurii — Title TBC

14:30–14:50 Hu Limin — Multi-scale burial and responses of organic carbon in Arctic marginal seas under the context of climate warming

14:50–15:10 Belyanin Pavel — Spatiotemporal changes in the range of Carpinus cordata in the south of the Russian Far East during MIS 5–1

15:10–15:30 Wang Anqi — Re-evaluating the radiogenic neodymium signature of North Pacific Intermediate Water: new insights from authigenic phases in Okhotsk Sea sediments

15:30–15:50 Coffee Break

15:50–16:10 Belyanin Pavel — Reflection of the warmest periods of MIS 3 in the vegetation of Primorye

16:10–16:30 Novoselova Yulia — Reconstructing vegetation and climate changes in the Sea of Japan during the Late Pleistocene and Holocene inferred from marine sediment

16:30–16:50 Pokrovsky Vadim — New marine reptile remains from the Anisian deposits of Russky Island (South Primorye, Russian Far East)

16:50–17:10 S'edin Vladimir — Magellan seamounts: position, morphology, geological structure, and evolution

17:10–17:30 Artemova Antonina — Environmental changes in the marginal seas of the northwestern Pacific during the Middle Pleistocene to Holocene: results of diatom analysis

17:30–17:50 Kovaleva Galina — Diatom flora during the early stages of the Sea of Azov's existence (8–7.5 ka cal bp)

17:50–18:10 Yanchenko Elena — Radiolarian responses of the northwestern Pacific to the orbital and millennial-scale environmental changes during the Late Pleistocene and Holocene

18:10–18:30 Kovaleva Galina — Correlation of transgressive–regressive stages of the Sea of Azov with global sea-level fluctuations and diatom analysis results

DAY 3 — WEDNESDAY, NOVEMBER 25, 2026

9:30–10:00 Welcome Coffee

Section 3. Geology and Mineral Resources / Conference Hall "Vladivostok"

Moderators: Bosin Alexandr, Du Jiazong

10:00–10:20 Kolesnik Olga — Marine ferromanganese deposits of northeastern Russia: recent advances from the POI FEB RAS and pathways to collaboration

10:20–10:40 Mikhailik Pavel — Forecast of ore potential of the Suzei Guyot, Emperor Ridge (Pacific Ocean)

10:40–11:00 Gavrilov Alexandr — Morphotectonics and features of the iron-manganese mineralization distribution within the West Pacific Seamount province

11:00–11:20 Du Jiazong — Permafrost thaw dynamics drive the regime shifts of iron-bound organic carbon sequestration in the East Siberian Arctic Shelf

11:20–11:40 Gavrilov Alexandr — Over plume magmatogenic swell on the Pacific Ocean bottom

11:40–12:00 Zhang Yuying — Massive mobilization of permafrost carbon in the East Siberian Arctic Shelf under Holocene sea-level rise

12:00–12:30 Coffee Break

Section 4. Marine Technology and Other Related / Conference Hall "Vladivostok"

Moderators: Bosin Alexandr, Liu Yanguang

12:30–12:50 Kolesnik Aleksandr — New technical solutions and devices developed at the POI FEB RAS for marine geology

12:50–13:10 Shmykov Nikita — Reconstruction of transboundary Tumen River water levels from ERA5 reanalysis using gradient boosting

13:10–13:30 Zuo Chengnan — Evaluation of Landsat 8/9 chlorophyll-a retrieval for Antarctic coastal waters

13:50–14:40 Poster Session/ Conference Hall "Vladivostok"

14:40–15:00 Closing Ceremony Co-Chairs: Vasilenko Yurii, Zou Jianjun

15:00–16:00 Banquet

Poster Session — Day 3, 13:50–14:40

Section 1. Marine Geological Processes and Their Effects

Kharchenko Tatyana — Petrophysical characteristics of granitoids from the Yamato Rise (Sea of Japan)

Sokolova Natalia — Gas hydrates and natural gas discharge in the Sea of Okhotsk

Lee Natalya — Crustal structure of the continent–Sea of Japan transition zone based on structural-density modeling results

Dasgupta Shamik — Pollutant distribution and morphometric sink analysis in the Kuril–Kamchatka Trench

Bessonova Elena — Features of anthropogenic morpholithogenesis in East Asia (based on the results of detailed geomagnetic mapping)

Section 2. Physical Oceanography and Climate Change

Sergeev Aleksandr — On the climatic ventilation of deep waters in the northern part of the Sea of Japan (East Sea): observations, processes, conceptual model

Mashkina Irina — Comparison of cyclonic subgyre characteristics in the Eastern Japan Basin using Argo float data and GLORYS12 reanalysis

Gayko Larissa — Temperature regime at annual intervals from 1960 to 2023 along the coast of Primorsky krai under climate change (northwest Sea of Japan)

Peng Yingyu — Interior near-inertial wave generation within a post-typhoon cyclonic eddy in the South China Sea

Hu Qunfei — Smartphone-based broadband remote sensing reflectance for coastal water monitoring: spectral reconstruction and ecological applications

Section 3. Paleoceanography and Paleoclimatology

Elbakidze Ekaterina — Marine diatom assemblages of southern Primorye as indicators of transgressive–regressive changes of the Sea of Japan during the Holocene

Romanova Aleksandra — Planktonic foraminifera from the southern Emperor Seamount Chain: productivity, upwelling and carbonate dissolution

Smyshlyaeva Olga, Bondarenko Liana — New faunistic data from the upper part of the section of the Lower Olenekian substage (Zybyrnyi Quarry (SMID), Artem)

Bazhenov Ilia — Reconstruction of ice conditions in the western Bering Sea during the Late Pleistocene–Holocene based on ice-rafted debris (IRD)

Vygovskaya Vasilina — Late Pleistocene–Holocene paleoenvironmental stages of the Shirshov Ridge area (Bering Sea) reconstructed from diatom assemblages

Liu Yanguang — Asynchronous Holocene variability of sea ice and primary production in the central Chukchi Sea under Pacific water forcing

Jia Mengjiao — Centennial Sedimentary Records of Phytoplankton Community Change and Environmental Response on the East Siberian Arctic Shelf

Section 4. Marine Mineral Resources and Mineralization

Gorbarev Anton —Ikaite, a low-temperature indicator mineral: Occurrences in the Eastern Arctic seas and the contribution of the POI FEB RAS

Grigoreva Kristina — Ecological and geochemical assessment of bottom sediments in the Arctic seas of Russia (the Kara, Laptev and East Siberian seas)

Astakhova Nadezhda — The distribution of gold, silver and elements of the platinum group (Pd, Pt, Rh, Ir, Ru) in the Holocene and modern sediments of the South Chukotka Plain

Kalughniy Daniil — Cs-137 in the Sakhalin Gulf and Tatar Strait in autumn 2025

Section 5. Ecosystem Dynamics

Elovskaya Olesya — Soft-bottom epibenthos in subtidal communities of Zolotoy Rog Bay (Peter the Great Bay, Sea of Japan) according to underwater video

Zhukovskaya Avianna — The dynamic of biochemical indicators of marine coastal invertebrate in response to environmental fluctuations

Shambarova Yulianna — Using the FlowCam device to determine the quantitative, size and species composition of phytoplankton

Section 6. Marine Technology and Other Related Fields

Dovzhenko Nadezhda — Genotoxicity of different types of plastic for some species of marine mollusks from Peter the Great Bay (Sea of Japan)

Koudryashova Yuliya — Study of PAH concentrations, composition, and sources in size-fractionated bottom sediments of the Peter the Great Bay

Osipova Elena — Reconstruction of stress intensity fields and specific strain energy in heterogeneous geological media

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