



Russia – China Bilateral Workshop

Marine Biology and Biodiversity Science in the 21st Century

September 23–24, 2025, Vladivostok, Russia

**A.V. Zhirmunsky National Scientific Center of Marine Biology,
Far Eastern Branch of the Russian Academy of Sciences**

Institute of Oceanology, Chinese Academy of Sciences

First Circular

On September 23–24, 2025, *A.V. Zhirmunsky National Scientific Center of Marine Biology FEB RAS* (NSCMB FEB RAS) and the *Institute of Oceanology, Chinese Academy of Sciences* (IOCAS) will hold the 7th NSCMB–IOCAS bilateral workshop in Vladivostok, Russia. The workshop will include only **oral** presentations and discussions. The workshop is dedicated to the 55th anniversary of the NSCMB FEB RAS, will be held immediately after the celebration day (September 22) and will precede the national marine biology meeting organized by the NSCMB on September 25–26, 2025.

Participants of the workshop are invited to submit **abstracts** to be published in advance; deadline for abstracts – **July 1**. Please submit your abstracts or papers as an e-mail attachment to Mrs Anastassia Grishina (with subject – “bilateral workshop China-Russia”): grishinaai222@mail.ru (please, cc to Dr. Konstantin Lutaenko (lutaenko@mail.ru)). Abstracts should not exceed 2–3 pages, and include affiliation and e-mail (see the sample page). Abstracts will be reviewed by the programme team of the Organizing Committee to fulfill the topics of the meeting and time availability for presentations.

Whereas mostly staff members of the NSCMB FEB RAS and IOCAS are participants of the workshop, the Organizing Committee may invite other collaborating scientists from Russia and China to attend the workshop.

Venue of the workshop – A.V. Zhirmunsky National Scientific Center of Marine Biology FEB RAS, Vladivostok, Russia (with a separate session in the Primorsky Aquarium, a branch of the NSCMB FEB RAS).

Vladivostok City

The city is located in the southern extremity of Muravyov-Amursky Peninsula. There are a chain of about 50 outlying islands in the Peter the Great Bay (only six of them have an area greater than one square kilometer: Russky, Popova, Reineke, Rikorda, Shkota, Elena). The city

stretches over 30 km from south to north, bordering by the Amursky Bay and the Ussuriysky Bay as parts of the Peter the Great Bay, Sea of Japan.

Vladivostok is the largest scientific and educational center of the Far East region, including the Far Eastern Federal University, Far Eastern Branch of Russian Academy of Sciences and numerous institutes of the Ministry of Science and Higher Education, and administrative capital of the Far Eastern Federal District of Russia. Other major scientific organizations are the Pacific Research Fisheries Center (TINRO Center) and the Far Eastern Regional Hydrometeorological Research Institute (DVNIGMI). The Society for Study of the Amur Region (OIAK), the oldest scientific organization in the Russian Far East, now operates as Primorye regional department of the Russian Geographical Society.

Vladivostok is a major cultural center of the Russian Far East. The Primorsky State Arsenyev` Museum in Vladivostok is the largest and the oldest museum in Primorye leading its history from the Museum of the Society for Study of the Amur Region. Of great interest are two aquariums, Submarine Museum S-56 and others, in particular, the Scientific and Educational FEFU Museum, Primorye Regional Art Gallery, museums of research institutions. The city has seven theaters, including Primorsky Opera and Ballet Theatre opened in 2013, and a circus. Svetlanskaya Street with building of the second half of the 19th century is an architectural gem of the city centre. Two giant cable-stayed bridges were constructed in Vladivostok, namely the Zolotoy Rog Bridge over the Golden Horn Bay in downtown, and the Russky Bridge from the mainland to Russky Island, where the APEC summit–2012 took place. The latter bridge is the longest cable-stayed bridge in the world. Sights of the city are also funicular, railway station and churches.



Joint Organizing Committee (JOC)

Russia: Academician, Prof. **Andrey V. Adrianov**, President of the NSCMB FEB RAS, Prof. **Igor Yu. Dolmatov**, Director of the NSCMB FEB RAS (Co-Chair of the JOC), Dr. **Konstantin A. Lutaenko** (Deputy Co-Chair of the JOC), Dr. **Vladimir V. Mordukhovich**, Dr. **Tatiana Yu. Orlova**, Dr. **Andrey V. Boroda**, Dr. **Olga G. Shevchenko**, Dr. **Tatiana V. Dautova**, Dr. **Anna V. Skripsova**, Dr. **Vadim M. Serkov**, Mrs. **Anastassia I. Grishina** (Secretary) (A.V. Zhirmunsky National Scientific Center of Marine Biology, Far Eastern Branch of the Russian Academy of Sciences, Vladivostok 690041, Russia; tel. +7 (423) 2317-111; Fax +7 (423) 2310-900; e-mail: grishinaai222@mail.ru, lutaenko@mail.ru).

China: Prof. **Wang Fan**, Director of the Institute of Oceanology, Chinese Academy of Sciences (Co-Chair), IEAS Academician, Prof. **Sun Song**, Prof. **Sun Xiaoxia** (Deputy Co-Chair), Prof. **Sha Zhongli**, Prof. **Zhang Libin**, Prof. **Zhang Junlong**, Dr. **Li Yanwei** (Institute of Oceanology, Chinese Academy of Sciences, Qingdao 266071, China; tel. +86 53282898912; Fax +86 532 82898612; e-mail: yanweili@qdio.ac.cn).

ABSTRACT FORMAT (SAMPLE)

Frozen collection of viable biological material from marine species

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The extinction of species is a natural and inevitable evolutionary process, but today it prevails over speciation: destruction of natural habitats, industrialization, unsustainable use of natural resources, etc. The conservation of every single species is required to maintain biodiversity, because eliminating any species may result in malfunction of whole ecosystems. Correctly cryopreserved cells and tissues from the species of interest contain information of diverse parameters, both of a particular organism and its population. They could be stored for decades, transported worldwide and recovered anytime, even from a small quantity of thawed biological material. Therefore, the technology for cryopreservation of marine hydrobiont cells and tissues need to be developed for increasing the extent of their integrity and functional activity after thawing. We succeeded in cryopreservation of marine mammal cells and tissues (from 20 individuals belonging to 10 species), salmon sperm (*Onchorhynchus masou*), unicellular algae (15 clones from 11 species), marine invertebrates (35 unique samples of embryonic cells, hemocytes, gonad and digestive gland cells from 6 species). All samples have been tested to be viable and functionally active after storage at cryogenic temperatures by means of light, electronic and confocal microscopy, molecular biological methods and flow cytometry. The complex of developed methods for cryopreservation and assessing the state of biological material from marine hydrobionts could be of a great use for researchers in cryobanks worldwide.

The study was supported in part by the Russian Foundation for Basic Research (grant no. 19-04-00752).

The work was partly performed at the "Far Eastern Electron Microscopy Center" (A.V. Zhirmunsky National Scientific Center of Marine Biology FEB RAS, Vladivostok, Russia).