





PROGRAM

of the

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

September 23 (Tuesday)

Venue – Conference Room of the NSCMB (Palchevsky Str., 17)

8.30. Chinese participants meet in the lobby of the Bay Garden Hotel to proceed by bus to the NSCMB with a member of the Organizing Committee

9.00–9.30. Registration of the Russian and Chinese participants and guests (Lobby of the NSCMB)

Welcome session

9.30–9.35. WELCOME SPEECH by Prof. **Igor Yu. Dolmatov**, Director of the A.V. Zhirmunsky National Scientific Center of Marine Biology FEB RAS

9.35–9.40. WELCOME SPEECH by Prof. **Wang Fan**, Director of the Institute of Oceanology CAS

SESSION 1 (Chair: Dr. Sun Xiaoxia)

9.40–10.00. Vladimir V. Mordukhovich, Anastasia S. Maiorova, Marine V. Malyutina, Andrey V. Adrianov. THE KURIL-KAMCHATKA TRENCH – THE MODEL AREA FOR LONG-TIME MONITORING OF THE HADAL IN THE NORTHWESTERN PACIFIC

10.00-10.20. Sun Song. A NEW OBSERVATION AND ASSESSMENT SYSTEM IS NEEDED TO MAINTAIN THE OCEAN HEALTH AND ACHIEVE SUSTAINABLE DEVELOPMENT

10.20-10.40. Coffee break and collective photo

10.40–11.00. Jianing Wang, Fan Wang. OBSERVATIONAL STUDY OF DEEP OCEAN CIRCULATIONS IN THE WESTERN PACIFIC

11.00–11.20. Konstantin A. Lutaenko. RUSSIAN-CHINESE COOPERATION IN MARINE BIODIVERSITY STUDIES: HISTORY AND MODERNITY

11.20–11.40. Olga A. Golovan, Marina V. Malyutina. DEEP DIVE: EXPLORING ISOPOD DIVERSITY IN THE NORTH PACIFIC TRENCHES WITH HOV *FENDOUZHE*

11.40–12.00. Juniong Zhang, Sadie Mills, Malcolm Clark, Owen Anderson, Jennifer Beaumont, Caroline Chin, Yan Tang. DEEP-SEA FAUNA DISTRIBUTION AND EVOLUTIONARY MECHANISMS ON WESTERN PACIFIC SEAMOUNTS

12.00-14.00. Lunch

SESSION 2-1 (Chair: Dr. Konstantin A. Lutaenko)

14.00–14.20. Tatiana N. Dautova, Evgenia Egorova, Anastasia Volkova, Galina Brak, Alena Konoplina. BOUNDARIES IN THE DEEP SEA – THE ROLE OF SEAMOUNTS IN FAUNA DISPERSAL

14.20–14.40. Ziyuan Hu, Xiaoxiao Sun, Song Sun. SIMULATING MARINE ECOSYSTEM HEALTH ON CHINA'S COAST

14.40-15.00. Elena M. Krylova. CHEMOSYMBIOTIC BIVALVE MOLLUSCS PLIOCARDIINAE (VESICOMYIDAE): TRACES OF PAST HABITATS AND DYNAMICS OF RANGES

15.00–15.20. Xinyu Liu, Yuxiu Xia, Jingru Teng, Pin Huan, Baozhong Liu. DEVELOPMENT OF THE SHELL FIELD IN THE POLYPLACOPHORAN MOLLUSK (CHITON) *ACANTHOCHITONA RUBROLINEATA*

15.20-15.40. Coffee break

SESSION 2-2 (Chair: Dr. Tatiana N. Dautova)

15.40–16.00. Vasily I. Radashevsky. STUDIES ON POLYCHAETES (ANNELIDA: POLYCHAETA) IN PACIFIC ASIA: PATTERNS, TRENDS AND CONSEQUENCES

16.00–16.20. Hao Wang, Juniong Zhang. COMPARATIVE PHYLOGEOGRAPHY AND ADAPTIVE GENOMICS OF TWO SYMPATRIC MANGROVE LUCINID CLAM SPECIES ALONG THE SOUTH CHINA SEA COAST

16.20–16.40. Marina V. Malyutina, Olga A. Golovan. GHOSTS OF THE HADAL: GIANT *ASELLOTES BATHYOPSURUS* FROM THE ALEUTIAN AND KURIL-KAMCHATKA TRENCHES

16.40–17.00. Anastasia L. Volkova, Salim S. Dautov, Tatiana N. Dautova. DEEP-SEA OPHIUROIDEA (ECHINODERMATA) ON THE EMPEROR SEAMOUNT CHAIN IN THE NORTHWESTERN PACIFIC: SPECIES COMPOSITION, COMMUNITY STRUCTURE, BIOGEOGRAPHY

17.00–17.30. Excursion to the NSCMB Museum

17.40. Bus departs to Bay Garden Hotel

Free time

September 24 (Wednesday)

Venue – Conference Room of the Primorsky Aquarium (Russky Island)

8.00 – Chinese participants meet in the lobby of the Bay Garden Hotel to proceed by bus to the Primorsky Aquarium, Russky Island

SESSION 3-1 (Chair: Dr. Andrey V. Boroda)

9.00–9.20. Olga G. Shevchenko, Director of Primorsky Aquarium. PUBLIC AQUARIUM: NEW MEANINGS AND NEW TRENDS IN ITS DEVELOPMENT, AND ITS CONTRIBUTION INTO RAISING ENVIRONMENTAL AWARENESS

9.20–9.40. Sun Xiaoxia, Meng Liujiang, Zheng Shan. CONSIDERATIONS FOR REDUCING HUMAN EXPOSURE TO MICROPLASTICS FROM CONSUMPTION OF FISH

9.40–10.00. Tatiana Yu. Orlova, Inna V. Stonik, Alexandra. Yu. Zvereva, Albina V. Podoba, Anton A. Zinov, Irina Yu. Petrova. PHYCOTOXINS IN THE FOOD WEB FROM THE RUSSIAN PACIFIC: THE FIRST EVIDENCE OF A POTENTIAL THREAT

10.00-10.20. Coffee break

SESSION 3-2 (Chair: Dr. Junlong Zhang)

10.20–10.40. Andrey V. Boroda, Daria N. Kamenskaya, Alina V. Komkova, Veronika A. Yachmen, Maia N. Dyagileva, Daniil D. Malyshev, Elizaveta A. Selivanova, Daria A. Golovko, Polina V. Esipova. STUDYING PHYSIOLOGY OF MARINE MAMMALS

10.40–11.00. Tatyana V. Sikorskaya. LIPIDOMICS OF MARINE ORGANISMS: MEMBRANE ADAPTATION, CORAL RESILIENCE, AND ECOLOGICAL APPLICATIONS

11.00-11.20. Yan Sun, Minxiao Wang, Chaolun Li, Song Sun. USING BATHYMODIOLINAE MUSSELS AS MODEL ORGANISMS TO STUDY ADAPTATION AND EVOLUTION IN DEEP-SEA ENVIRONMENTS

11.20–11.40. Andrei V. Grinchenko, Yulia N. Sokolnikova, Nikita A. Shved, Ivan A. Buryak, Daniil I. Semirulnik, Daniil N. Kozyrev, Vadim V. Kumeiko. A MARINE MOLLUSK-DERIVED PROTEIN MKC1QDC AS AN EFFECTIVE CANDIDATE FOR GLYCOSYLATION-SPECIFIC DETECTION AND SUPPRESSION OF GLIOMAS AND CARCINOMAS

11.40–12.00. Libin Zhang. PHYSIOLOGICAL AND BEHAVIORAL CHARACTERISTICS OF SEA CUCUMBERS: COGNITION AND APPLICATIONS

12.00-13.00. Lunch

- **SESSION 4** (Chair: Dr. Vadim V. Kumeiko)
- 13.00–13.20. Alexander A. Karpenko, Vyacheslav S. Odintsov, Aleksandra A. Istomina, Maxim A. Karpenko. DEGRADATION OF POLYETHYLENE AND POLYPROPYLENE IN DIGESTIVE TRACTS OF ECHINODERMS
- 13.20–13.40. Shaobing Zong, Huijie Liu, Junlong Zhang. CHROMOSOME-LEVEL GENOME ASSEMBLY OF THE DEEP-SEA CHITON GRANDIDENSICHITON CHINENSIS PROVIDES INSIGHTS INTO THE ADAPTATION TO THE COLD SEEP HABITAT
- 13.40-14.00. Olga V. Yurchenko, Darya D. Golubinskaya, Alexander V. Kalachev, Olga M. Korn. REPRODUCTION OF RHIZOCEPHALA: NEW DATA ON RECEPTACLE DEVELOPMENT
- 14.00–14.20. V.V. Kumeiko, N.V. Goncharov, V.S. Gulaia, D.V. Lanskikh, I.N. Baklanov, V.O. Doroshenko, N.A. Shved, V.M. Farniev, I.A. Buriak, V.S. Melikhova, M.E. Shmelev, V.M. Zhmenia, O.Yu. Kuziakova, A.S. Belousov, A.K. Kravchenko, V.E. Lebedev. BIOENGINEERED CELL-BASED MODELS AND MOLECULES FROM MARINE ORGANISMS FOSTERING THE DEVELOPMENT OF PERSONALIZED ANTICANCER DRUGS
- **14.20–14.40. Elena V. Levchenko.** HYDROCHEMICAL AND HYDROLOGICAL ENVIRONMENTAL FACTORS AND BIOLOGICAL PRODUCTIVITY OF COASTAL WATER AREAS OF PETER THE GREAT BAY, SEA OF JAPAN
- **14.40–14.50.** Organizing Committee. Closing remarks
- **15.00–15.45.** Demonstration of mammal skills n Primorsky Aguarium
- **16.00–18.00.** Excursion in Primorsky Aquarium
- **18.00-19.45.** Farewell party in the Primorsky Aquarium's restaurant
- **20.00.** All participants meet in front of the PA to proceed by bus to Bay Garden Hotel