





PROGRAMME

of the

Russia-China Bilateral Workshop

Marine Biodiversity for a Healthy Ocean – Biodiversity, Functional Groups & Ocean Health

October 10-11, 2019, 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

Yantai Institute of Coastal Zone Research, Chinese Academy of Sciences

October 10 (Thursday)

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 and placement of posters (Lobby of the NSCMB)

Welcome session

- **9.30–9.35.** *Welcome speech* by Dr. **Vyacheslav S. Odintsov,** Co-Chair of the Organizing Committee, Acting Director of the A.V. Zhirmunsky National Scientific of Marine Biology FEB RAS
- **9.35–9.40.** *Welcome remarks* by Mr. **Zhenyu Wang**, Deputy Director of the International Cooperation Bureau, Chinese Academy of Sciences (CAS)
- **9.40–9.45.** *Welcome remarks* by Prof. **Song Sun,** Director of Marine Science College, University of CAS
- **9.45–9.50.** *Opening remarks* by Prof. **Chaolun Li,** Deputy Director of the Institute of Oceanology CAS
- 9.50-10.00. Collective photo
- **SESSION 1** (Chair: Dr. Konstantin A. Lutaenko)
- 10.00–10.20. Song Sun. Challenges and strategies in the ecosystem-based management
- 10.20-10.40. Coffee break
- **10.40–11.00. Tatiana Yu. Orlova.** Marine biobank of the NSCMB FEB RAS: the first lessons learned and prospection
- 11.00–11.20. Chaolun Li. Introduction of Center for Ocean Mega-Science
- 11.20–11.40. Rencheng Yu. Health of coastal marine ecosystems associated with the impacts of harmful algal blooms
- **11.40–12.00. Yuri Ph. Kartavtsev.** DNA-barcoding: from modern general biology paradigm verification to sea food mislabeling detection
- 12.00-14.00. Lunch

- **SESSION 2** (Chair: Dr. Sun Xiaoxia)
- **14.00–14.20**. Anatoly L. Drozdov, **Vladimir V. Yushin.** Study of life in the Sea of Japan: reproduction and development
- **14.20–14.40. Mariya A. Maiorova,** A.V. Ivanova, M.A. Skazina, P.P. Strelkov, Nellia A. Odintsova. A search of mollusks from some Russian seas (Sea of Japan, White Sea and Barents Sea) with abnormal hemocytes
- **14.40–15.00. Andrey V. Boroda,** Mariya A. Maiorova, Y.O. Kipryushina, Konstantin V. Yakovlev, Nellia A. Odintsova. Frozen collection of viable biological material from marine species
- **15.00–15.20. Evgeniy S. Balakirev**. Genetic variation and symbiotic associations in sea urchin *Strongylocentrotus intermedius*: an integrative approach for marine biodiversity analysis, monitoring, and conservation
- 15.20-15.40. Coffee break
- **15.40–16.00. Feng Zhao**, Kuidong Xu, Pingping Huang, Tong Zhou. Biogeographic and co-occurrence patterns of microbial eukaryotes from surface water to abyssal sediment in the Western Pacific Ocean
- **16.00–16.20. Anatoly L. Drozdov.** Glass sponges unique animals with organosilica crystal-like composite skeleton as biomimetic model
- **16.20–16.40. Zhencheng Tao.** Influence of Liaoning Hongyanhe Nuclear Power Plant on zooplankton community
- **16.40–17.00. Evgeniya V. Pushchina.** High-speed calcium *in vivo* imaging to determine the neuronal and neurogenic activity of brain cells of salmonids
- **17.00–17.20.** E.A. Bogatyrenko, Sergey I. Maslennikov, T.I. Dunkay, **Tigran A. Gevorgyan**, A.V. Kim. Evaluation of the influence of biologically active microorganisms on the Far Eastern sea cucumber *Apostichopus japonicus*
- **17.20–17.40. Natalia L. Demchenko,** John W. Chapman, Valery A. Sosnin, Ilya A. Shcherbakov, Sergey E. Dyakov, Victor V. Ivin, Evgeniy P. Dats. Hydrological influences on amphipod abundances with depth in the gray whale feeding areas on the Northeastern Sakhalin shelf (the Sea of Okhotsk)

Poster session (see a list of posters at end of programme) 17.40–18.30.

October 11 (Friday)

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

8.30 – Chinese participants meet in the lobby of the Bay Garden Hotel to proceed by bus to the Primorsky Aquarium

SESSION 3 (Deep-Sea Biology) (Chair: Dr. Tatiana Dautova)

9.30–9.50. Kuidong Xu, Yang Li, Lin Gong, Ning Xiao, Wei Jiang, Dong Dong, Xuwen Wu, Junlong Zhang, Yu Xu. Seamount megabenthic communities: isolated or connected?

9.50–10.10. Tatiana N. Dautova, Sergey V. Galkin, Konstantin R. Tabachnik. First data on the composition and structure of vulnerable marine ecosystems of the Emperor Chain – key taxa, landscapes, biogeography

10.10–10.30. Xuwen Wu. Biodiversity and distribution of deep-sea polychaetes in the Western Pacific Ocean

10.30-10.45. Coffee break

10.45–11.05. Vasily I. Svetashev, Vladimir I. Kharlamenko, Anastasia S. Maiorova. Investigation of deep-sea ecosystems by the use fatty acids markers

11.05–11.25. Zifeng Zhan, Yu Xu, Kuidong Xu. Assessing coral diversity in the Kocebu Guyot seamount using environmental DNA

11.25–11.45. Marina V. Malyutina. Deep-sea swimming isopods Munnopsidae (Crustacea, Asellota) from the Kuril-Kamchatka Trench area, Northwest Pacific

11.45–12.05. Xiaoxia Sun. The "seamount effect" of phytoplankton in the tropical western Pacific Ocean

12.10-13.30. Lunch

SESSION 4 (Chair: Dr. Rencheng Yu)

13.30–13.50. Eduard A. Titlyanov, Tamara V. Titlyanova, X.B. Li, H. Huang. Seaweed flora of coral reefs in Sanya Bay (Hainan Island, China) at extremely polluted site from fish farm

13.50–14.10. **Guo Jie,** Irina Sergievskaya, Zhang Xi, Stanislav Ermakov. Emulsification characteristics of crude oil and its influence on normalized radar cross section

14.10–14.30. Linlin Chen, Quanchao Wang, Xiaojing Li, Zhengquan Zhou, **Baoquan Li.** Community succession of macrobenthic fauna over 60 years in Bohai Sea, China

- 14.30–14.50. Chaofeng Wang, Wuchang Zhang. Vertical distribution of oceanic tintinnid (Ciliophora: Tintinnida) assemblages from the Bering Sea to Arctic Ocean through Bering Strait
- 15.00–15.45. Mammal show in Primorsky Aquarium
- 16.00–17.00. Excursion in Primorsky Aquarium
- **17.00-18.00.** Free time in and around Primorsky Aquarium
- **18.00.** All participants meet in front of the PA to proceed by bus to Acfes-Seyo Hotel for reception
- 19.00–21.00. Reception dinner in Acfes-Seyo Hotel

POSTERS

(posters are to be placed in the lobby of the NSCMB)

Jing Chen, Baoquan Li. Harmful algal blooms mitigation using natural polysaccharide xanthan and local materials

Linlin Chen, Xiaojing Li, Zhengquan Zhou, Lufei Yang, Baoquan Li. Primary attempt using DNA metabarcoding to reveal macrobenthic community in Bohai Sea, China

Daria A. Demidkova. Biochemical diversity of fatty acids reflects the nutrition strategy of cold-water corals

Tigran A. Gevorgyan, Sergey I. Maslennikov, Ludmila A. Botsun. Research on hatching and development of red king crab larvae under controlled conditions

Olga A. Golovan, Marina V. Malyutina. Paedomorphosis in deep-sea isopods (Crustacea: Malacostraca)

Xiaojing Li, Linlin Chen, Zhengquan Zhou, Baoquan Li, Xin Liu, Bo Song. Spatio-temporal patterns of subtidal macrobenthic assemblages in Longkou Artifical Island areas in the Bohai Sea, China

Konstantin A. Lutaenko, Irina E. Volvenko. Sea of Japan: a hotspot of molluscan biodiversity

Sergei I. Maslennikov, Janna N. Vityazeva, Kseniya S. Berdasova, Arman A. Pahlevanyan. A study of the settlement of juvenile Far Eastern sea cucumber (*Apostichopus japonicus*) on a collector in cages in Possjet Bay

Arman A. Pahlevanyan, Sergey I. Maslennikov, Kseniya S. Berdasova. Spawning capabilities of mitten crab *Eriocheir japonica* under laboratory conditions

Olga N. Pavlyuk, Yulia A. Trebukhova, Tatiana S. Tarasova, Baoquan Li, Linlin Chen, Bo Song, Xiaojing Li, Konstantin A. Lutaenko. Taxonomic composition and distribution of meiofauna communities from the intertidal zone in Sishili Bay, Yellow Sea coast (northern China)

Svetlana A. Rodkina. High level of eicosapentaenic acid in total lipids of amphipods from northeastern Sakhalin Islands shelf as an indicator of Western gray whale's food quality

Afshan Siddiq, Ivan Yaremenko, Tatyana A. Gloriozova, Alexander O. Terent'ev, Vera A. Vil, Nick Savidov, Valery M. Dembitsky. Sulphated steroids derived from marine sources and their biological activity

Alla V. Silina. Seasonal cycles in the somatic and reproductive growth of the Yesso scallop in a polluted area

Tatyana S. Tarasova, Olga N. Pavlyuk, Yulia A. Trebukhova, Baoquan Li, Linlin Chen, Bo Song, Xiaojing Li, Konstantin A. Lutaenko. Taxonomic composition and distribution of recent benthic Foraminifera from the intertidal zone in Sishili Bay, Yellow Sea coast (northern China)

Evgeniya E. Vekhova. Investigation of mussel's byssus formation system in *Mytilus trossulus* Gould, 1850 (Bivalvia: Mytilidae) from the Sea of Japan

Pyotr M. Zhadan, Marina A. Vaschenko. Phytoplankton is the main environmental factor influencing the reproduction of the sea urchin *Strongylocentrotus intermedius* in the northwestern Sea of Japan

Alexander A. Artyukov, Anatoly L. Drozdov. Sea urchins of the genus *Mesocentrotus* as a model for studying animal longevity

Tatiana N. Dautova. Octocorallia as a key taxon in the vulnerable marine ecosystems of the Emperor Chain (Northwest Pacific): diversity, distribution and biogeographical boundary

Nina I. Grigoryeva. The interannual growth variability of the Yesso scallop (*Mizuhopecten yessoensis* Jay, 1857) in hanging culture in Minonosok Bay (Possjet Bay, Peter the Great Bay, East Sea/Sea of Japan)

Mariya B. Ivanova, **Alexandra P. Tsurpalo**. Zonal-biogeographical structure of species composition of bivalve mollusks in the intertidal zone of the Far Eastern seas of Russia

Elena E. Kostina, Alexandra P. Tsurpalo. The intertidal macrobenthic communities of Yuri Island (Lesser Kuril Ridge)

Leonid E. Lebedev, Evgeny B. Lebedev. On the study of the avifauna of marine and near-water birds on the northeastern coast of Sakhalin Island (Sea of Okhotsk)

Konstantin A. Lutaenko. Coastal marine biodiversity of Vietnam (South China Sea), its current problems and major threats

Olga G. Shevchenko, Kirill O. Tevs, Maria A. Shulgina. Dynamics of phytoplankton and chlorophyll "a" concentrations in Paris Bay (Russky Island, Sea of Japan) in 2014–2015

Tatyana V. Sikorskaya, Ekaterina V. Ermolenko, Andrey B. Imbs. Lipidomic approach to the study of the zooxanthellae and polyp host contribution in total lipid composition of the soft coral *Sinularia siaesensis*

Vitaly V. Sukhanov. Generalisation of Bertalanffy–Gompertz model for multidimensional stochastic growth of organisms

Anna B. Vasilyeva, Irina R. Levenets, Evgeny B. Lebedev. The taxonomic and geographical diversity of benthic flora of Minonosok Bay, Possjet Bay (Peter the Great Bay, Sea of Japan)