

The 40th International Symposium on the Okhotsk Sea & Polar Oceans

English



An old solitary tree standing on a snowy hill

15-18 February 2026

**Mombetsu Arts & Culture Center, Mombetsu Municipal Museum,
Mombetsu Machinaka Art Museum, Mombetsu Citizens' Public Hall**

**Okhotsk Sea and Polar Oceans
Research Association
(OSPORA)**

PURPOSE OF SYMPOSIUM

Sea ice, which covers about 10% of the world's oceans, plays a major role in the Earth's thermal balance and generates the driving forces of atmospheric and oceanic general circulation. The Sea of Okhotsk is the world's lowest-latitude sea to freeze and marks the southernmost limit of drift ice. Every winter, 60–70% of the Sea of Okhotsk becomes covered with drift ice, bringing both benefits and challenges to our daily lives. In recent years, the impacts of global warming have led to a rapid decline in Arctic sea ice extent, causing a variety of environmental problems. At the same time, the “Arctic Sea Route” linking the Pacific Ocean and Europe has attracted increasing attention, though the international situation surrounding it remains delicate.

Sea ice and drift ice are deeply connected not only to the global environment but also to productive activities such as fisheries, agriculture, and industry. This symposium addresses a wide range of topics, from the latest sea ice research to global warming, environmental issues, marine organisms, the Northern Sea Route, polar regions, and various issues concerning the Okhotsk region.

The International Symposium on the Okhotsk Sea & Polar Oceans has been held annually in Mombetsu City since its first meeting in 1986. Although the symposium was canceled in 2021 due to the spread of COVID-19, the academic sessions were held online in 2022 and in a hybrid format in 2023. From 2024 onward, the academic sessions have returned to an in-person format, and public lectures, the Children's Drift Ice Symposium, and the commemorative reception have been resumed.

This year's International Symposium on the Okhotsk Sea & Polar Oceans in 2026 marks the milestone 40th meeting, at which many research presentations will be given on a variety of themes. We hope that the symposium will provide a fruitful forum for all participants to engage in meaningful discussions and deepen exchanges. We sincerely hope you enjoy the symposium.

Organized by

City of Mombetsu
Symposium Committee

Organized and Sponsored by

Okhotsk Sea and Polar Oceans Research Association (OSPORA)
Arctic Research Center, Hokkaido University (ARC)
National Institute of Polar Research (NIPR)
Japan Agency for Marine-Earth Science and Technology (JAMSTEC)
Institute of Low Temperature Science, Hokkaido University (ILTS)
Kitami Institute of Technology (KIT)
Tokai University, Sapporo Campus
Tokyo University of Agriculture, Faculty of Bioindustry
Tokyo University of Marine Science and Technology
Graduate School of Fisheries Sciences, Hokkaido University
Field Science Center for Northern Biosphere, Hokkaido University
Atmosphere and Ocean Research Institute, The University of Tokyo (AORI)
Hokkaido National Fisheries Research Institute
Japan Consortium for Arctic Environmental Research (JCAR)

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- Tsuneo Nishiyama, Prof. Emer., Tokai University, Japan
- Natsuhiko Otsuka, Okhotsk Sea Ice Museum of Hokkaido, Japan
- Toshihiro Ozeki, Hokkaido University of Education, Sapporo Campus, Japan
- Shin Sugiyama, Hokkaido University, Japan
- Satoru Taguchi, National Institute of Polar Research, Japan
- Shuhei Takahashi, Prof. Emer., Kitami Institute of Technology, Japan
- Kazutaka Tateyama, Kitami Institute of Technology, Japan
- Hajime Yamaguchi, National Institute of Polar Research, Japan

(Alphabetical order)

14:30-16:40 ◆ **Opening Ceremony**

【Main Hall】

■ **Welcome Address**

Akinori Yamazaki	Mayor, City of Mombetsu
Natsuhiko Otsuka	Chair, The Symposium Committee
Hiroaki Nomura	Director, Okhotsk General Subprefectural Bureau

■ **Introduction of Overseas Participants**

《Canada》

Dr. Kumiko Azetsu-Scott	Bedford Institute of Oceanography
Dr. Aileen Aseron Espiritu	UiT, The Arctic University of Norway
Ms. Christine Guilbault	Embassy of Canada
Ms. Theresa De Haan	Embassy of Canada
Ms. Geneva Nobles	Qikiqtani Inuit Association
Mr. Richard Paton	Qikiqtani Inuit Association
Prof. Rocky Taylor	Memorial University of Newfoundland

《Finland》

Prof. Kamrul Hossain	University of Lapland
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《Italy》

Dr. Alberto Alberello	University of East Anglia
Mr. Lorenzo Ercolani	Hofdi Cottages
Ms. Sara Fusco	University of Lapland & University of Akureyri

《Norway》

Prof. Geir Hønneland	Fridtjof Nansen Institute
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《Taiwan》

Dr. Yu-Chiao Liang	National Taiwan University
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《United Kingdom》

Prof. Emilian Parau	University of East Anglia
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《United States of America》

Mr. Billy Adams	North Slope Borough
Prof. Courtney Carothers	University of Alaska Fairbanks
Ms. Roberta Tuurraq Glenn	University of Alaska Fairbanks
Dr. Sonia Ibarra	University of Alaska Fairbanks
Mr. Nick Jacuk	University of Alaska Fairbanks
Dr. Emily Lescak	University of Alaska Fairbanks

■ **Greetings**

Prof. Kamrul Hossain	University of Lapland, Finland
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■ **Attraction** Dance by Mombetsu Otani Kindergarten

Traditional Japanese Dance, Nishikawa Ryu Nihon Buyo

■ **Special Lecture**

(in Japanese language only)

- I . 40th anniversary of the International Symposium: Legacy and future of Okhotsk and Polar Oceans studies Shuhei Takahashi (Okhotsk Sea Ice Museum)
- II . Eat Well and Enjoy Life Hiroyuki Morisaki (Actor, TEAM NACS)

18:00-19:30 ◆ **Memorial Reception (Banquet)**

【3F】

Monday 16 February

Hall, 1F, Mombetsu Arts & Culture Center

9:00-9:10 **Opening Address** Natsuhiko Otsuka (Chair of the Symposium Committee)
Introduction of the Aota Masaaki Award

9:10-11:15 **Keynote Address, Session A:**

9:10 **A-1** Progress in Northern Sea Route research over the past 40 years and its current status
Eiji Sakai (Sasakawa Peace Foundation)

9:40 **A-2** Canada's Arctic foreign policy
Christine Guilbault, and Theresa De Haan (Embassy of Canada to Japan)

10:05 **A-3** Inuit-led conservation in the Canadian Arctic
Richard Paton, and Geneva Nobles (Mar. Wildlife Stewardship, Qikiqtani Inuit Assoc., Canada)

10:40 **A-4** 40th anniversary of the International Symposium: Legacy and future of Okhotsk and Polar Oceans studies
Shuhei Takahashi (Okhotsk Sea Ice Museum), and Mitsuo Fukuchi (NIPR)

13:30-15:30 **Public Program : Okhotsk~The Sea of Our Homeland** *(in Japanese language only)*

I. Technologies for quality preservation and refrigeration of fishes
Keisuke Moriya (Abashiri Fish. Res. Inst.)

II. Recent status of salmon stocks on the Sea of Okhotsk coast and efforts toward their recovery
Yasuyuki Miyakoshi (Kitami Salmon Enhancement Program Assoc.)

15:40-18:10 **Scientific Session B : Marine Biology and Fisheries in the Ice-Covered Waters**

Special Conference Room, 3F, Mombetsu Arts & Culture Center

13:00-18:00 **Workshop C : Next-Generation Observations and Modeling for Integrated Approaches to Polar Climate Change**

Meeting Room, 3F, Arts & Culture Center

13:00-14:00 **Scientific Session D : Polar Engineering**

14:10-17:20 **Scientific Session E : Life in Cold Region/Interdisciplinary Area**

Mombetsu Municipal Museum

13:00-14:20 **Workshop F : Exploring the Potential of AI and Machine Learning for Sea Ice Research**

《Online Session》

Machinaka Art Museum

13:00-17:00 **Scientific Session G : Online Session**

IARC and Sasakawa Peace Foundation Session
Scientific Session

Tuesday 17 February

Hall, 1F, Mombetsu Arts & Culture Center

9:00-15:30 **Workshop H : Arctic Governance at a Crossroads:
Understanding Change and Exploring the Future**

16:00-18:00 **Public Program : How Do We Act at Enhancing Local Disaster Resilience ?**
(in Japanese language only)

Considering the Improvement of Disaster Response Capability in the Okhotsk Region
-Learning from the Noto Peninsula Earthquake-

Lecture: I. New disaster prevention information provided from 2026
Akiko Miura (Abashiri Local Meteorological Observatory, Japan Meteorological Agcy.)
II. Efforts to improve disaster awareness in Hokkaido
Akio Yamaguchi (Hokkaido Okhotsk General Promotion Bu.)

Panel Discussion:

--Learning about Self-Help and Mutual Assistance Initiatives such as Disaster Preparedness Education, Disaster Volunteer Activities, and Evacuation Shelter Management-

Special Conference Room, 3F, Mombetsu Arts & Culture Center

9:00-10:25 **Workshop I : Arctic Policy through Science and Human Activity**

10:35-18:00 **Workshop J : The Changing Ice-Covered Ocean and New Utilization**

Meeting Room, 3F, Arts & Culture Center

9:00-11:30 **Scientific Session K : Physical and Chemical Oceanography/Climate**

13:00-14:45 **Workshop L : Interactions between the Antarctic Ice Sheet and
the Global Climate System**

14:55-17:50 **Workshop M : The Okhotsk Sea: Unique Weather and Climate
Generated by the Earth's Cool Spot**

Mombetsu Municipal Museum

9:00-11:55 **Workshop N : Plankton Ecology in Cold Regions:
From Molecules to Ecosystems**

13:30-14:55 **Workshop O : Current Situation and Issues of Studies on Stock
Management and Stock Enhancement in Hokkaido, Japan**

15:05-18:00 **Workshop P : Seabirds and Marine Mammals in Response to
Environmental and Social Change**

Mombetsu Central Hotel

19:00~20:30 **Dinner Party for Friendship between Scientists & Volunteers**

Wednesday 18 February

Hall, 1F, Mombetsu Arts & Culture Center

(in Japanese language only)

9:00-10:50 **Workshop Q : Career Development for Young Researchers in Arctic and Antarctic Research**

11:00-11:30 **Closing Session**

- A Review of the Symposium,
- Prize-awarding Ceremony of the Aota Masaaki Award
- Closing Remarks, Natsuhiko Otsuka (Chair, The Symposium Committee)

14:00-16:00 **Public Program : Symposium on the Forest-Ocean Linkage**

Current State of Cutting-Edge Forestry

(in Japanese language only)

-Development of High-Hardness Materials Using Densification Technology Applied to Larch-

Lecture I. Background and objectives of the densification technology

Takanobu Sasaki (Hokkaido Univ.)

II. Manufacturing methods and fundamental properties of densified larch wood

Naoyuki Furuta (Forest Products Res. Inst.)

III. Strength testing of furniture joints made from densified larch wood

Yuka Tsukamoto (Hokkaido Univ.)

IV. Chair development and commercialization using densified larch wood

Yuichiro Yamagami (Yamagami Mokko Co., Ltd.)

Pannel Discussion

Mombetsu Municipal Museum

13:30-17:20 **Public Program : The Okhotsk Terroir Symposium 2026 in Mombetsu**

(in Japanese language only)

-The Message Left by the Okhotsk Culture: Exploring the Origins of Okhotsk Culture and the Future and Potential of Okhotsk Tourism: Part 3-

Part 1 Exploring Ideas for Sharing Okhotsk with the World through Practical Reports from Various Fields

Lecture: I. Tourism utilizing archaeological sites Masahiko Tasai (Cultural Heritage Support)

II. On publishing travel with Jomon art Kyoko Shimizu (Kyuryudo Publishing)

III. The potential of a journey exploring Okhotsk culture Aasami Miyashita (Hokkaido Univ.)

IV. On the future of eastern Hokkaido Takuro Nakanishi (Dot Eastern Hokkaido)

Part 2 Pannel Discussion

Monday 16 - Wednesday 18 February

Lobby, 3F, Mombetsu Arts & Culture Center

Exhibition

Ex-1 End of the Kuroshio large meander in 2017-2025

Takao Nakajin (Tokai Univ.)

Ex-2 Centennial of the Hakuai Maru Incident, the Crab Cannery Ship Novel-The history of canned crab and Mombetsu

Masaya Yamada (Hokkaido Assoc. Protection of Cultural Property)

Mombetsu Citizens' Public Hall

13:10-14:30 **Symposium on Sea Ice for Children**

(in Japanese language only)

I. Sea ice, the Sea of Okhotsk, and earth's environment
Natsuhiko Otsuka (Okhotsk Sea Ice Museum)

II. Life in the Arctic

Richard Paton, and Geneva Noble (Mar. Wildlife Stewardship, Qikiqtani Inuit Assoc., Canada)

Drift Ice Quiz

Monday 16 - Wednesday 18 February

Lobby, 1F, Mombetsu Arts & Culture Center

Observation Equipment Technology Exhibition



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Saturday 14 February - Sunday 22 March

Okhotsk Sea Ice Museum

Sponsorship Event: Okhotsk Story 7 Photo Exhibition - Precious Moments

With the aim of sharing the appeal of the Okhotsk region with people in Hokkaido and beyond, this exhibition presents the region's distinctive natural landscapes, flora, and fauna through a collection of uniquely expressive photographs.

9:00	【Opening Session】 Chair, Seiji Katakura (Mombetsu City) Opening Address: Natsuhiko Otsuka (Chair of the Symposium Committee) Introduction of the Aota Masaaki Award
9:10	【A: Keynote Address】 Chair, Natsuhiko Otsuka (Okhotsk Sea Ice Museum) A-1 Progress in Northern Sea Route research over the past 40 years and its current status ○Eiji Sakai (Sasakawa Peace Foundation)
9:40	A-2 Canada's Arctic foreign policy ○Christine Guilbault, and Theresa De Haan (Embassy of Canada to Japan)
10:05	A-3 Inuit-led conservation in the Canadian Arctic ○Richard Paton, and Geneva Nobles (Mar. Wildlife Stewardship, Qikiqtani Inuit Assoc., Canada)
10:30	Break
10:40	A-4 40th anniversary of the International Symposium: Legacy and future of Okhotsk and Polar Oceans studies ○Shuhei Takahashi (Okhotsk Sea Ice Museum), and Mitsuo Fukuchi (NIPR)
11:15	Lunch
13:30 15:30	【Public Program, Okhotsk~The Sea of Our Homeland】 (in Japanese language only) I. Technologies for quality preservation and refrigeration of fishes Keisuke Moriya (Abashiri Fish. Res. Inst.) II. Recent status of salmon stocks on the Sea of Okhotsk coast and efforts toward their recovery Yasuyuki Miyakoshi (Kitami Salmon Enhancement Program Assoc.)
15:30	Break
15:40	【B: Marine Biology and Fisheries in the Ice-Covered Waters】 Chair, Irene D. Alabia (Hokkaido Univ.) B-1 Biological and ecological characteristics of Arctic charr caught by artisanal gillnet fishing in the coastal areas of northwest Greenland ★B Shoma Tsujimura, Makoto Tomiyasu, Masaki Yamano, Yasuzumi Fujimori, Shin Sugiyama (Hokkaido Univ.), and Yoko Mitani (Kyoto Univ.)
16:00	B-2 Pollution of blue mussels due to dumpsite in Qaanaaq in northwestern Greenland ★B Masaki Yamano, Tatsuya Fukazawa, Yasumasa Tojo, Makoto Tomiyasu, Tamami Ikeuchi, Shoma Tsujimura, Yasuzumi Fujimori, Shin Sugiyama (Hokkaido Univ.), and Yoko Mitani (Kyoto Univ.)
16:20	B-3 Use of the Okhotsk Tower as an Artificial Submerged Structure by <i>Sebastes taczanowskii</i> ○Yukinori Nanake (Ctrl. Res. Inst. Electric Power Indus.), Makoto Tomiyasu (Hokkaido Univ.), Yuta Urabe (Okhotsk Garinko & Tower), and Seiji Katakura (Mombetsu City)
16:40	B-4 Live fish transportation of crested flounder <i>Pseudopleuronectes schrenki</i> and threestripe rockfish <i>Sebastes trivittatus</i> from Mombetsu in the Sea of Okhotsk coast ○Seiji Katakura (Mombetsu City), Toshiyuki Ito (Ito Fishing Tackle Shop), Tatsuro Harumi (Asahikawa Medical Univ.), and Hajime Matsubara (Kanazawa Univ.)
17:00	Break
17:10	B-5 Conceptualizing a Pan-Pacific salmon knowledge portal ○Emily Lescak (Univ. Alaska Fairbanks, USA), Matthew Jones, Maggie Klope (Univ. California Santa Barbara, USA), William Manley (Univ. Colorado, USA), Craig Tweedie (Univ. Texas El Paso, USA), Shirly Stephen (Univ. California Santa Barbara, USA), Koh Hasegawa, Yuki Iino (Japan Fish. Res. Educ. Agcy.), Irene Alabia (Hokkaido Univ.), and Hajo Eicken (Univ. Alaska Fairbanks, USA)
17:30	B-6 Habitat estimation in salmon driftnet fishing grounds by integrating satellite ocean color data into fisheries observations ★B Yuki Iino, and Shunpei Sato (Japan Fish. Res. Educ. Agcy.)
17:50	B-7 Recent climate-induced marine habitat shifts drive Japanese chum salmon decline ○Irene D. Alabia (Hokkaido Univ./Univ. Alaska Fairbanks, UAS), Sei-Ichi Saitoh (Hokkaido Univ./Digital Hokkaido Community/Green & Life Innovation, Inc.), Jorge Garcia Molinos, Takafumi Hirata (Hokkaido Univ.), Yasuyuki Miyakoshi (Kitami Salmon Enhancement Program Assoc.), Fumihiro Takahashi (Green & Life Innovation, Inc.), Hiromichi Ueno, and Masahide Kaeriyama (Hokkaido Univ.)

	【C: Workshop, Next-Generation Observations and Modeling for Integrated Approaches to Polar Climate Change】	
13:00	Introduction and Chair, Jun Inoue (NIPR)	
13:05	C-1	Investigating the impacts of Arctic sea ice loss on large-scale atmospheric circulation using physical and hybrid climate models ○Yu-Chiao Liang (Ntl. Taiwan Univ., Taiwan), Nicholas J. Lutsko (Scripps Inst. Oceanography, USA), and Young-Oh Kwon (Woods Hole Oceanographic Inst., USA)
13:20	C-2	Rebuilding Arctic atmospheric observing capacity: A scalable pathway from enhanced campaigns to community-led monitoring ○Jun Inoue (NIPR), and Hajo Eicken (Univ. Alaska Fairbanks, USA)
13:35	C-3	Predictability of sensor icing caused by supercooled fog in polar ocean operations -Part 2: Evaluating inversion layers ○Souichiro Sueyoshi (Nippon Mar. Enterprises Ltd.), and Fumikazu Taketani (JAMSTEC)
13:50	C-4	Validation and analysis of cloud microphysical properties using the EarthCARE satellite in the Arctic ○Kaori Kono, Hajime Okamoto, and Kaori Sato (Kyushu Univ.)
14:05	C-5	Arctic weather patterns in summer and their representation in a large ensemble climate simulation ○Akio Yamagami (Ctr. Environmental Sci. Saitama), and Takahiro Toyoda (Meteorological Res. Inst.)
14:20	Break	
	Chair, Jun Ono (NIPR)	
14:30	C-6	Ocean acidification in Arctic gateways: Insights from the Canadian Arctic ○Kumiko Azetsu-Scott (Bedford Inst. Oceanography Canada, Canada), and Craig Lee (Univ. Washington, USA)
14:45	C-7	Vortex merger and instability ★P Mio Hosako, and Koji Shimada (Tokyo Univ. Mar. Sci. Tech.)
15:00	C-8	Hydrographic changes in the Arctic Ocean ○Koji Shimada, Yumi Takabayashi, Kohei Hayakawa, and Rin Harada (Tokyo Univ. Mar. Sci. Tech.)
15:15	C-9	Revealing the structure of the oceanic Beaufort Gyre using Arctic surface current datasets ○Rin Harada, and Koji Shimada (Tokyo Univ. Mar. Sci. Tech.)
15:30	C-10	Re-examination of the Bering Strait throughflow: The importance of non-geostrophic components in the sea ice-ocean boundary layer ★P Kohei Hayakawa, and Koji Shimada (Tokyo Univ. Mar. Sci. Tech.)
15:45	Break	
	Chair, Hisatomo Waga (Univ. Alaska Fairbanks, USA/NIPR)	
15:55	C-11	Factors of sea ice variation in the Barents and Kara seas during the entire winter ★P Kanata Oishi, and Koji Shimada (Tokyo Univ. Mar. Sci. Tech.)
16:10	C-12	Toward seasonal-to-interannual Arctic sea-ice forecasts using a climate model ○Jun Ono (NIPR), Yoshiki Komuro, Hiroaki Tatebe (JAMSTEC), Noriaki Kimura (Univ. Tokyo) and, Hironori Yabuki (NIPR)
16:25	C-13	Origin and fate of sediment-laden sea ice: contribution to material transport ★P Hisatomo Waga (Univ. Alaska Fairbanks, USA/NIPR), Mizuki Kuga (Hokkaido Univ./Japan Fish. Res. Educ. Agcy.), Noriaki Kimura (Univ. Tokyo), Kazuki Nakata (JAXA), and Kay I. Ohshima (Hokkaido Univ.)
16:40	C-14	Size distribution of particulate matter inside sea ice in Lützw-Holm Bay ○Masato Ito (Univ. Tokyo), Takeshi Tamura (NIPR/SOKENDAI), Keigo D. Takahashi (Hokkaido Univ.), Atsushi Yoshida (NIPR), Kazutaka Tateyama (Kitami Inst. Tech.), Takuhei Shiozaki (Univ. Tokyo), Takuya Sato (Univ. Tokyo), Shigeru Aoki, Kay I. Ohshima, Sumito Matoba (Hokkaido Univ.), Satoshi Imura (NIPR/SOKENDAI), Yutaka W. Watanabe (Hokkaido Univ.), Shuki Ushio (NIPR), Hiroto Kajita (Hirosaki Univ.), Ryo Matsuda (Soka Univ.), Ryosuke Makabe (NIPR/SOKENDAI), and Kohei Mizobata (Tokyo Univ. Mar. Sci. Tech.)
16:55	Break	

Monday 16 Feb. 2026

Special Conference Room, 3F, Arts & Culture Center

	【C: Workshop, Next-Generation Observations and Modeling for Integrated Approaches to Polar Climate Change】 Chair, Atsushi Yoshida (NIPR)
17:05	C-15 Shipborne measurements of mineral dust and black carbon aerosols over the Southern Ocean in the austral summer ★P Atsushi Yoshida (NIPR), Yutaka Tobo (NIPR/SOKENDAI), Hiroshi Kobayashi (Univ. Yamanashi), Kouji Adachi (Meteorological Res. Inst.), Nobuhiro Moteki (Tokyo Metropolitan Univ.), and Jun Inoue (NIPR/SOKENDAI)
17:20	C-16 Reproducibility of surface downward radiation in the regional climate model and reanalysis at Dome Fuji, Antarctica ★P Kyohei Yamada (NIPR), and Jun Inoue (NIPR/SOKENDAI)
17:35	C-17 Three-dimensional atmospheric rivers contribute to Antarctic precipitation ★P Kazu Takahashi (SOKENDAI), Jun Inoue, Kazutoshi Sato, Naohiko Hirasawa (SOKENDAI/NIPR), and Kyohei Yamada (NIPR)
17:50	Discussion

Monday 16 Feb. 2026

Meeting Room, 3F, Arts & Culture Center

	【D: Polar Engineering】 Chair, Akihisa Konno (Kogakuin Univ.)
13:00	D-1 Framework and trial calculations of navigability assessment of ships in ice waters, 2nd Report: Simple assessment method using continuous icebreaking capability ○Shotaro Uto (Hokkaido Univ.), and Natsuhiko Otsuka (Hokkaido Univ./Okhotsk Sea Ice Museum)
13:20	D-2 Comparison of ice resistance in brash ice channel between numerical simulation and ice tank tests ○Keisuke Anzai, Shigeya Mizuno, and Yutaka Yamauchi (Japan Mar. United Corp.)
13:40	D-3 Laboratory study of ice floe impact loads on a structure in waves ★E Hongtao Li, Takuji Waseda (Univ. Tokyo), Junji Sawamura (Univ. Osaka) and, Raed Lubbad (Norwegian Univ. Sci. Tech., Norway)
14:00	Break
	【E: Life in Cold Region/Interdisciplinary Area】 Chair, Shuhei Takahashi (Okhotsk Sea Ice Museum)
14:10	E-1 Exporting sweet mini tomato making system to Russia -Developing automated water supply system for highways in Hokkaido- ○Kanichiro Matsumura (Kinjo Univ.), Kuzin Vitaly Dmitreievich (Nizhny Novgorod Univ., Russia), and Satoshi Morita (Hokuriku Univ.)
14:30	E-2 “Temperature-adjustable bench” Kansei Assessment in Cold Regions -Nikko City zero carbon promotion project- Mayu Fujita, ○Kei Horio, Mizuna Kondou, Muhammad Nazeh Azhad Bin Muhammad Afifi, Jinseok Seo, Kyohei Kitazono, and Noriyoshi Yokoo (Utsunomiya Univ.)
14:50	E-3 The history and functions of the Antarctic midwinter festival in a closed environment ★I Tomoka Sugita (Hokkaido Univ.)
15:10	E-4 Co-creating walkable winter cities: A case study of the City of Sapporo Tran Thi Tu Uyen, Chinatsu Igarashi, Kristine Marie Apaya Casals, Eman H.E. Toulbah, and ○Marina Lomaeva (Hokkaido Univ.)
15:30	Break
15:40	E-5 Practical disaster preparedness education through the “Do-HUG” shelter management game: A case study from Noboribetsu City, Hokkaido ★I Yumi Nakano, and Tomoe Katoh (Hokkaido Univ.)
16:00	E-6 Russia’s post-2022 Arctic expert discourse: The Northern Sea Route and Asia ○Marina Lomaeva, Artem Suslov, and Juha Saunavaara (Hokkaido Univ.)
16:20	E-7 Tamamta (All of Us): Uplifting indigenous knowledge and stewardship to transform fisheries and education in Alaska ○Courtney Carothers, Jessica Black, Peter Westley, and Sonia Ibarra (Univ. Alaska Fairbanks, USA)
16:40	E-8 Characteristics of social infrastructure development and maintenance for industrial creation in northern regions: Insights from linguistic data of next-generation executives of construction companies Tomoe Katoh, and ○Juha Saunavaara (Hokkaido Univ.)
17:00	E-9 Toward resilient futures: Integrating critical geopolitics and societal security foresight in Arctic urban sustainability ○Aileen Aseron Espiritu (UiT Arctic Univ. Norway, Norway)

	【F: Workshop, Exploring the Potential of AI and Machine Learning for Sea Ice Research】
13:00	Introduction and Chair, Jun Ono (NIPR)
13:05	F-1 Future developments of sea ice information utilizing AI and numerical models by ADS and the Arctic and Antarctic Sea Ice Information Center (ASIC) ○Hironori Yabuki, Takeshi Sugimura, Yoshihiro Niwa (NIPR), Motomu Oyama (Kogakuin Univ.), and Jun Ono (NIPR)
13:20	F-2 Development of a sea-ice prediction model with machine learning ○Jun Ono (NIPR), Motomu Oyama (Kogakuin Univ.), and Hironori Yabuki (NIPR)
13:35	F-3 Sea ice concentration prediction in the coastal region of Shiretoko using deep learning and a comparison between Utoro and Rausu ○Ayano Yoshida, and Kazutaka Tateyama (Kitami Inst. Tech.)
13:50	F-4 An attempt to automate shipborne visual sea ice observations using AI-driven analysis of onboard camera imagery ○Kazutaka Tateyama (Kitami Inst. Tech.), Seita Hoshino (Univ. Tokyo), and Midori Nagao (Kitami Inst. Tech.)
14:05	Discussion
14:20	Break

13:00	【G: Online Session】 -IARC and Sasakawa Peace Foundation- “Supporting Indigenous Approaches to Climate Change Response” by Sasakawa Peace Foundation and The International Arctic Research Center of the University of Alaska Fairbanks I. ○Atsushi Watanabe (Sasakawa Peace Foundation) and Yuta Komori (The Tokyo Foundation/Meiji Univ.) II. ○Hajo Eicken (Univ. Alaska Fairbanks, USA) Speakers: Go Iwahana, Courtney Carothers, Nick Jacuk, Sonia Ibarra, Roberta Tuurraq Glenn, Emily Lescak (Univ. Alaska Fairbanks, USA) and Billy Adams (Utqiagvik)	Chair, Natsuhiko Otsuka (Sasakawa Peace Foundation)
15:50	Break	
16:00	-Scientific Session- G-1 Characteristics of sea ice leads in the Laptev and East-Siberian Seas retrieved from SuomiNPP VIIRS images ○Anastasia A. Ershova, Lyudmila N. Dymant, Ekaterina G. Bojkaya, and Karina G. Kortikova (Arctic Antarctic Res. Inst., Russia)	Chair, Natsuhiko Otsuka (Sasakawa Peace Foundation) and Artem Suslov (Hokkaido Univ.)
16:20	G-2 On the features of pollution spreading in high latitudes ○Ferdinand Mkrtychyan, Evgeny Novichikhin, and Maxim Mkrtychyan (Kotelnikov Inst. Radioengineering Electronic, Russia)	
16:40	G-3 About remote monitoring systems to study of the marine ecosystems ○Ferdinand Mkrtychyan (Kotelnikov Inst. Radioengineering Electronic, Russia)	

	【H:Workshop, Arctic Governance at a Crossroads: Understanding Change and Exploring the Future】	
9:00	Introduction, Hajime Kimura (JAMSTEC)	
	I . Environmental Governance	Chair, Aki Tonami (Univ. Tsukuba)
9:05	H-1 Multilateral cooperation for cetacean conservation in northern seas: Regime complexes and institutional interplay ○Ayako Okubo (Tokai Univ.)	
9:25	H-2 The ICJ advisory opinion on climate change and the Arctic: Recognition of disproportionately higher risk and procedural participation of Arctic States ○Izumi Kubota (Ntl. Inst. Environmental Studies)	
9:45	H-3 Mechanisms of citizen participation and remedy in the new governance theory ○Aki Tonami (Univ. Tsukuba)	
10:05	Break	

	【H:Workshop, Arctic Governance at a Crossroads: Understanding Change and Exploring the Future】 II. Regional and Socio-Political Governance Chair, Juha Saunavaara (Hokkaido Univ.)
10:15	H-4 Institutional resilience of the Russia-Norway and Russia-Japan's post-2022 fisheries cooperation ○Marina Lomaeva (Hokkaido Univ.), Geir Hønneland (Fridtjof Nansen Inst., Norway), and Takeshi Hamada (Hokkai-Gakuen Univ.)
10:35	H-5 Local Communities in the Arctic infrastructure development driven by tourism and national security concerns ○Juha Saunavaara, and Takafumi Fukuyama (Hokkaido Univ.)
10:55	H-6 Economic development of the Russia's Arctic and Far Eastern Regions after 2022 ○Shinichiro Tabata (Hokkaido Univ.)
11:15	Lunch
	III. Scientific Governance Chair, Hajime Kimura (JAMSTEC)
13:00	H-7 The significance of the CAOFA in the current Arctic cooperation: Through the lense of science diplomacy ○Osamu Inagaki (Kobe Univ.)
13:20	H-8 Legal and practical considerations of marine scientific research in the Arctic Ocean -The case of Japan's new Arctic research vessel Mirai II- ○Hajime Kimura (JAMSTEC)
13:40	H-9 International economic law issues concerning indigenous traditional hunting: focusing on small cetacean subsistence hunts ○Tomohiko Kobayashi (Otaru Univ. Commerce)
14:00	Break
	IV. Arctic Policy Chair, Hajime Kimura (JAMSTEC)
14:10	H-10 Japan's Arctic policy network: Key actors in national diet discourse ○Artem Suslov, and Fujio Ohnishi (Hokkaido Univ.)
14:30	H-11 From rights on paper to Arctic policy in practice: Indigenous participation and energy transition ★I Sara Fusco (Univ. Lapland, Finland/Univ. Akureyri, Iceland)
14:50	H-12 Advancing Taiwan's Arctic engagement: Geopolitics, identity, and scientific stakeholding ○Aileen Aseron Espiritu, Marc Lanteigne (UiT Arctic Univ. Norway, Norway), and Tse-Kang Leng (Academia Sinica/Ntl. Chengchi Univ., Taiwan)
15:10	Discussion
15:30	Break
	【Public Program, How Do We Act at Enhancing Local Disaster Resilience ? 】【(in Japanese language only)】 Chair, Shuji Mori (Abashiri Develop. Constr. Dept., Hokkaido Develop. Bu.)
16:00	Introduction, Natsuhiko Otsuka (Okhotsk Sea Ice Museum/Symposium Committee Chair)
16:05	Lecture: I. New disaster prevention information provided from 2026 Akiko Miura (Abashiri Local Meteorological Observatory, Japan Meteorological Agcy.)
16:25	II. Efforts to improve disaster awareness in Hokkaido Akio Yamaguchi (Hokkaido Okhotsk General Promotion Bu.)
16:40	Break
16:50	Panel Discussion: -Learning about Self-Help and Mutual Assistance Initiatives such as Disaster Preparedness Education, Disaster Volunteer Activities, and Evacuation Shelter Management- Coordinator, Masahiro Nemoto (Japanese Red Cross Hokkaido College of Nursing)
	[Panelists] Osamu Ijima (Abashiri Local Meteorological Observatory) Akio Ishikawa (Mombetsu Shokotsu Junior High School) Moe Shimizu (Mombetsu City Social Welfare Council) Makoto Ishikawa (Mombetsu City)
	Review, Masahiro Nemoto (Japanese Red Cross Hokkaido College of Nursing)
17:55	Closing Remarks, Takehiko Suzuki (Abashiri Develop. Constr. Dept., Hokkaido Develop. Bu.)
19:00	Dinner Party with Volunteer Groups Mombetsu Central Hotel

【I:Workshop, Arctic Policy through Science and Human Activity】	
9:00	Introduction and Chair, Sakiko Hataya, (Sasakawa Peace Foundation) and Natsuhiko Otsuka (Sasakawa Peace Foundation/Hokkaido Univ./Okhotsk Sea Ice Museum)
9:05	I-1 Human activity and the Arctic Ocean ○Natsuhiko Otsuka (Sasakawa Peace Foundation/Hokkaido Univ./Okhotsk Sea Ice Museum)
9:25	I-2 Reviewing Japan's Arctic policy through the multi-sectoral study group ○Sakiko Hataya (Sasakawa Peace Foundation)
9:45	I-3 Japan's Arctic science contribution and science diplomacy ○Hiroyuki Enomoto (NIPR/Sasakawa Peace Foundation)
10:05	I-4 The Sasakawa Peace Foundation's Arctic initiatives: Looking at the past, present, and future ○Yuta Komori (The Tokyo Foundation/Meiji Univ.)
10:25	Break
【J:Workshop, The Changing Ice-Covered Ocean and New Utilization】	
10:35	Introduction and Chair, Takuji Waseda (Univ. Tokyo)
10:40	J-1 A new sea ice thickness dataset and its application to Arctic sea ice prediction ○Noriaki Kimura, Hiroyasu Hasumi, and Takuji Waseda (Univ. Tokyo)
11:00	J-2 Direct observation of an extreme landfast sea-ice melting event in Lützow-Holm Bay in 2025 triggered by winter breakup and amplified by ice-albedo feedback ○Tsubasa Kodaira, Takuji Waseda, Masato Ito, Ryota Tai, Daiki Okamoto, Kohei Mikami (Univ. Tokyo), and Daisuke Shimizu (NIPR)
11:20	J-3 Interannual variability of the ice-covered area in Saroma-ko Lagoon derived from Landsat imagery ○Taiga Nohara, and Kazutaka Tateyama (Kitami Inst. Tech.)
11:40	J-4 Development of artificial ice for reproducing ice bending failure ○Shingo Kojima, and Akihisa Konno (Kogakuin Univ.)
12:00	Lunch
Chair, Akihisa Konno (Kogakuin Univ.)	
13:30	J-5 Simulating wave-induced ice fracture: an MPM approach with rotational degrees of freedom -Material point method with plate formulation- ○Igor Gribanov, Takuji Waseda (Univ. Tokyo), and Rocky Taylor (Memorial Univ. Newfoundland, Canada)
13:50	J-6 LIGGGHTS analysis of brash ice channel navigation ○Takaya Onishi, and Akihisa Konno (Kogakuin Univ.)
14:10	J-7 Development and validation of icebreaking simulation method using LS-DYNA ○Daichi Takahashi, and Akihisa Konno (Kogakuin Univ.)
14:30	J-8 Proposed large-scale in-situ lab testing at HERF: Advancing the characterization and modelling of sea ice deterioration for safe seasonal shipping ○Rocky Taylor (Memorial Univ. Newfoundland, Canada)
14:50	Break
Chair, Noriaki Kimura (Univ. Tokyo)	
15:00	J-9 Development of an Ice-MMG-Based Digital Twin Mockup for ships navigating in broken ice fields ○Akihisa Konno (Kogakuin Univ.)
15:20	J-10 SPH-DEM analysis of ice piece clearing around an ice-going ship ★E Akiyoshi Tsukuda, and Akihisa Konno (Kogakuin Univ.)
15:40	J-11 Numerical analysis of flow fields induced by ship-ice interaction using the overset method ★E Kaito Kimura, and Akihisa Konno (Kogakuin Univ.)
16:00	J-12 Interannual variability of wave systems inducing fast ice break-up in Lützow-Holm Bay ★E Ryota Tai (Univ. Tokyo), Takuji Waseda (Univ. Tokyo/JAMSTEC), and Tsubasa Kodaira (Univ. Tokyo)
16:20	Break
Chair, Tsubasa Kodaira (Univ. Tokyo)	
16:30	J-13 From experiments to theory: Dissipation-driven spectral downshifting of waves under ice ★E Koya Sato (Univ. Tokyo), Takuji Waseda (Univ. Tokyo/JAMSTEC), and Tsubasa Kodaira (Univ. Tokyo)

	【J:Workshop, The Changing Ice-Covered Ocean and New Utilization】	
	Chair, Tsubasa Kodaira (Univ. Tokyo)	
16:50	J-14 Wave attenuation in the marginal ice zone ★P Alberto Alberello, Rhys Ransome, and Davide Proment (Univ. East Anglia, UK)	
17:10	J-15 Hydroelastic waves on floating ice plates ○Emilian Parau (Univ. East Anglia, UK), Claudia Tugulan, and Olga Trichtchenko (Univ. Western Ontario, Canada)	
17:30	J-16 Detecting directional wave spectrum in ice and ice floe deformation -Preliminary results from JOIS 2025- ○Takuji Waseda, Koya Sato (Univ. Tokyo), and Jean Rabault (Norwegian Meteorological Inst., Norway)	
17:50	Discussion	
19:00	Dinner Party with Volunteer Groups Mombetsu Central Hotel	

	【K:Physical and Chemical Oceanography/Climate】	
	Chair, Kazutaka Tateyama (Kitami Inst. Tech.)	
9:00	K-1 Barotropic water exchange between the ice cavity and the open ocean in a non-friction fluid ○Nan Yuan (Tohoku Univ.), Humio Mitsudera (Hokkaido Univ.), and Sayaka Yasunaka (Tohoku Univ.)	
9:20	K-2 Triggering mechanism of the 2014 abrupt subsurface warming in the Bering Sea: A numerical study ○Hung-Wei Shu (JAMSTEC), Hiroaki Tatebe (JAMSTEC/Japan Advanced Inst. Mar. Ecosys. Change), Tatsuo Suzuki, Takao Kawasaki, Yoshiki Komuro (JAMSTEC), and Shinya Kouketsu (Japan Advanced Ins. Mar. Ecosys. Change/JAMSTEC)	
9:40	K-3 Possible role of Japan Trench topography in the anomalous northward penetration of the Kuroshio extension ○Toru Miyama (JAMSTEC)	
10:00	Break	
	Chair, Hung-Wei Shu (JAMSTEC)	
10:10	K-4 Basic research on runoff characteristics in small river basins in Qaanaaq Village ○Gaku Tanaka, Taro Mori, and Iku Kishita (Hokkaido Univ.)	
10:30	K-5 Origins and formation process of atmospheric organic aerosol in the southern Sea of Okhotsk during the phytoplankton bloom in spring ★I Zhengyang Fang, Yuzo Miyazaki, Eri Tachibana (Hokkaido Univ.), Hitomi Yoshida (Garinko Tower Co., Ltd.), Katsushi Iwamoto, and Seiji Katakura (Mombetsu City)	
10:50	K-6 Temporal and spatial changes in mineral dust composition deposited on an alpine snowpack ★P Pia Ataka, Ryo Sugiyama, Noboru Furukawa, and Nozomu Takeuchi (Chiba Univ.)	
11:10	K-7 Leveraging InSAR and field observations in revealing long-term post-fire permafrost evolution in north Yukon ○Zetao Cao, and Masato Furuya (Hokkaido Univ.)	
11:30	Lunch	
	【L:Workshop, Interactions between the Antarctic Ice Sheet and the Global Climate System】	
13:00	Introduction and Chair, Masashi Machida (Hokkaido Univ.)	
13:05	L-1 Numerical modeling of ocean circulation and ice shelf melt process in the Weddell Sea ★P Hiroki Moriyoshi (Hokkaido Univ.), Yoshihiro Nakayama (Dartmouth College, USA), Mathias van Caspel, Markus Janout (Alfred-Wegener-Inst. Helmholtz Ctr. Polar Mar. Res., Germany), and Alena Malyarenko (Univ. Canterbury, New Zealand)	
13:25	L-2 Tracing sediment provenance to decode Aurora Basin dynamics during past super interglacials ○Javier Maldonado-Ugarte, Osamu Seki (Hokkaido Univ.), Keiji Horikawa (Toyama Univ.), Tomohisa Irino (Hokkaido Univ.), Takuya Itaki, and Saki Ishino (Ntl. Inst. Adv. Indus. Sci. Tech.)	
13:45	L-3 Understanding meltwater dynamics in west Greenland ★P Wakaba Otani (Hokkaido Univ.), Yoshihiro Nakayama (Dartmouth College, USA), Michael Wood (Moss Landing Mar. Lab., USA), Ian Fenty (NASA, USA), Claudia Wekerle (Alfred Wegener Inst., Germany), and Vigan Mensah (Hokkaido Univ.)	
14:05	L-4 Role of eddies in the transformation of Dense Shelf water into Antarctic bottom water off Cape Darnley ★P Masashi Machida, Kay I. Ohshima, Vigan Mensah (Hokkaido Univ.), Daisuke Simizu (NIPR), Kazuki Nakata (JAXA), Mizuki Kuga (Japan Fish. Res. Educ. Agcy.), Alex Fraser (Univ. Tasmania, Australia), Takeshi Tamura (NIPR), and Yasushi Fukamachi (Hokkaido Univ.)	
14:25	L-5 Global climate implications through Antarctic ice-ocean interaction during the Last Interglacial ★I Mutsumi Iizuka, Takuya Itaki (Ntl. Inst. Adv. Indus. Sci. Tech.), Masanobu Yamamoto, and Osamu Seki (Hokkaido Univ.)	
14:45	Break	

Tuesday 17 Feb. 2026

Meeting Room, 3F, Arts & Culture Center

14:55	[M:Workshop, The Okhotsk Sea: Unique Weather and Climate Generated by the Earth's Cool Spot] Introduction and Chair, Meiji Honda (Nigata Univ.)
15:00	M-1 Reconstruction of climate change in the early 19th century around Hokkaido ○Yoshio Tagami (Toyama Univ.)
15:20	M-2 Sea ice conditions in the Sea of Okhotsk in the 2024/2025 winter season ○Mitsuhiro Komuro, Satoshi Sugimoto, Keiji Hamada, and Yuji Akasaka (Japan Meteorological Agcy.)
15:40	M-3 Relationship between sea ice variability in the southern Sea of Okhotsk and the East Sakhalin Current ○Yuka Sawa (Univ. Tsukuba), Hiroshi Kuroda (Hokkaido Univ.), Takuya Nakanowatari (Japan Fish. Res. Educ. Agcy.), and Hiroaki Ueda (Univ. Tsukuba)
16:00	M-4 Distribution tendencies of Japan-Sea Polar-Airmass Convergence Zone (JPCZ) and characteristics of the atmospheric field ★P Satomu Takahashi, Meiji Honda, and Naoya Takahashi (Nigata Univ.)
16:20	M-5 Rapid surface pressure drops in wintertime Meso-β-Scale disturbances using high-frequency observations ★P Karen Uchibori, Meiji Honda, and Naoya Takahashi (Nigata Univ.)
16:40	Break
16:50	M-6 Inertia-gravity waves around a cutoff low observed over the North Pacific off the Tohoku in the summer of 2025 ★P Masami Nakao (Niigata Univ.), Fumiaki Ogawa (Mie Univ.), Satoru Kasuga (Mie Univ./Hokkaido Univ.), and Meiji Honda (Niigata Univ.)
17:10	M-7 Midlatitude marine warming and summer atmospheric responses during 2023-2025: Implications for sustained heat extremes in East Asia ○Hiroaki Ueda (Univ. Tsukuba), Masaya Kuramochi (Japan Meteorological Agcy.), Keisuke Morimoto, Yuki Shigihara, Ayumu Tsukada, Satoru Okajima, Tomoshige Inoue (Univ. Tsukuba), and Shuhei Maeda (Japan Meteorological Agcy.)
17:30	M-8 Influence of the Okhotsk Sea on the wintertime snowfall in the Japan Sea coast ○Meiji Honda (Nigata Univ.), Yoshihiro Tachibana (Mie Univ.), Takahiro Toyoda (Meteorological Res. Inst.), Hiroaki Ueda (Univ. Tsukuba), and Katsushi Iwamoto (Mombetsu City)
19:00	Dinner Party with Volunteer Groups Mombetsu Central Hotel

Tuesday 17 Feb. 2026

Mombetsu Municipal Museum

	[N:Workshop, Plankton Ecology in Cold Regions: From Molecules to Ecosystems] Introduction and Chair, Junya Hirai (Univ. Tokyo)
9:00	
9:05	N-1 Physiological responses of growth and photosynthesis of the Antarctic cryptophyte <i>Geminigera cryophila</i> to changes in temperature, light, and salinity ★B Ren Shimada and Koji Suzuki (Hokkaido Univ.)
9:25	N-2 Contrasting toxicity profiles and population genetics reveal a north-south divide in <i>Dinophysis fortii</i> ○Satoshi Nagai, Hajime Uchida, (Japan Fish. Res. Educ. Agcy.), Akira Miyazono, Takanori Kuribayashi (Ctrl. Fish. Res. Inst., Hokkaido Res. Org.), Yasufumi Hada (Headquarters, Hokkaido Res. Org.), Masafumi Natsuike (Hakodate Fish. Res. Inst., Hokkaido Res. Org.), Yuki Kosaka (Aomori Pref. Indus. Tech. Res. Ctr.), Kazutaka Miyahara (Hyogo Pref. Tech. Ctr. Agriculture), Kana Yamamoto (Nagasaki Pref. Inst. Fish.), Yuki Funakoshi (Kyoto Pref. Agriculture, Forestry Fish. Tech. Ctr.), Sirje Sildever (Tallinn Univ. Tech., Estonia), Wai Mun Lum (Mie Univ.), Natsuko Nakayama, Ryoji Matsushima (Japan Fish. Res. Educ. Agcy.), Toshiyuki Susuki (Kitasato Univ.), Kenji Takata (Ntl. Inst. Adv. Indus. Sci. Tech.), Nina Yasuda (Univ. Tokyo), Naoko Ishikawa, Ying-Hong He, and Yoshihisa Suyama (Tohoku Univ.)
9:45	N-3 Satellite remote sensing for harmful algae monitoring in Hokkaido Waters ○Takafumi Hirata (Hokkaido Univ.), Daichi Arima (Ctrl. Fish. Res. Inst., Hokkaido Res. Org.), Noriko Azuma, Megumu Takahashi (Tokyo Univ. Agriculture), Natsuhiko Otsuka (Okhotsk Sea Ice Museum), Katsushi Iwamoto, Seiji Katakura (Mombetsu City), Yuko Arai-Kichise (Tokyo Univ. Agriculture), and Yuh Shiwa (Tokyo Univ. Agriculture)
10:05	N-4 Long-term (from 1997 to 2025) changes of zooplankton community based on functional traits in the Mombetsu Port, southern Okhotsk Sea ★B Dongwoo Kim, Kohei Matsuno (Hokkaido Univ.), Seiji Katakura, Soshi Hamaoka, Katsushi Iwamoto (Mombetsu City), and Atsushi Yamaguchi (Hokkaido Univ.)
10:25	Break

The Aota Masaaki Award Candidate ★E:Engineering, ★P:Physics, ★B:Biology, ★I:Interdisciplinary

	【N:Workshop, Plankton Ecology in Cold Regions: From Molecules to Ecosystems】 Chair, Junya Hirai (Univ. Tokyo)
10:35	N-5 Seasonal change of jellyfish species composition and abundance between spring and fall 2025 around the Okhotsk Tower, Mombetsu, Hokkaido ★B Syota Mukai (Tokai Univ.), Seiji Katakura, Katsushi Iwamoto (Mombetsu City), Tomonori Isada (Hokkaido Univ.), and Yuichi Nosaka (Tokai Univ.)
10:55	N-6 Effects of ocean acidification on larval shell development in scallop ○Keisuke Shimizu, Katsunori Kimoto and Masahide Wakita (JAMSTEC)
11:15	N-7 Molecular-based analyses revealing zooplankton diversity during sea ice period in the Okhotsk Sea ○Junya Hirai (Univ. Tokyo), Atsushi Yamaguchi (Hokkaido Univ.), and Seiji Katakura (Mombetsu City)
11:35	N-8 Population structure of the copepod <i>Calanus glacialis</i> in the high-latitude regions of the Northern Hemisphere ★B Nanami Yumura (Univ. Tokyo), Seiji Katakura (Mombetsu City), Kohei Matsuno (Hokkaido Univ.), and Junya Hirai (Univ. Tokyo)
11:55	Lunch
	【O:Workshop, Current Situation and Issues of Studies on Stock Management and Stock Enhancement in Hokkaido, Japan】
13:30	Introduction and Chair, Nobukazu Sato (Hokkaido Res. Org. Mariculture Fish. Res. Inst.)
13:35	O-1 Current situation and issues of studies on stock management and stock enhancement in Hokkaido, Japan ○Nobukazu Sato (Hokkaido Res. Org. Mariculture Fish. Res. Inst.)
13:55	O-2 Current status and challenges in research on whelk resource management in the Pacific coast of Hokkaido, Japan ○Koudai Takahashi, and Yasuhiro Kuwahara (Hokkaido Res. Org. Mariculture Fish. Res. Inst.)
14:15	O-3 High water temperature tolerance of barfin flounder <i>Verasper moseri</i> juvenile ○Naoyuki Misaka, and Taihei Matsuda (Hokkaido Res. Org. Mariculture Fish. Res. Inst.)
14:35	O-4 Species composition of estuarine fish assemblages in Hidaka Bay ★B Junki Ataka, Koudai Takahashi, Hideo Takahara, Yasuhiro Kuwahara, and Rei Sakanoue (Hokkaido Res. Org. Mariculture Fish. Res. Inst.)
14:55	Break
	【P:Workshop, Seabirds and Marine Mammals in Response to Environmental and Social Change】
15:05	Introduction and Chair, Yuta Sakuragi (Kyoto Univ.)
15:10	P-1 Camera and microphone monitoring of key sea-birds in Greenland (Little auks) ○E. A. Podolskiy, J. B. Thiebot, (Hokkaido Univ.) M. Ogawa (NIPR/Hokkaido Univ.), L. Paker (Univ. Bremen, Germany), M. Niwano (Meteorological Res. Inst.), R. Kusaka (Hokkaido Museum of Northern Peoples), A. Yushima (Hokkaido Univ.), K. L. Johansen, A. Mosbech (Aarhus Univ., Denmark), and S. Sugiyama (Hokkaido Univ.)
15:30	P-2 Observations of narwhal sounds from boat-based hydroacoustic recordings in northwestern Greenland: comparison with passive acoustic monitoring ★B Sara Kim (Kyoto Univ.), Evgeny A. Podolskiy (Hokkaido Univ.), Monica Ogawa (NIPR), Yuta Sakuragi, and Yoko Mitani (Kyoto Univ.)
15:50	P-3 From the sky: Drone-based behavioral observation of Arctic cetaceans ○Monica Ogawa (NIPR), Mamarut Kristiansen (Qaanaaq, Greenland), and Evgeny Podolskiy (Hokkaido Univ.)
16:10	P-4 Seasonal relationships between marine environmental dynamics and behavioral responses of ringed seals at tidewater glacier fronts ○Yuta Sakuragi (Kyoto Univ.), Aqqalu Rosing-Asvid (Greenland Inst. Natural Resources), Yefan Wang (Univ. Edinburgh, UK), Shin Sugiyama (Hokkaido Univ.), and Yoko Mitani (Kyoto Univ.)
16:30	Break

	[P:Workshop, Seabirds and Marine Mammals in Response to Environmental and Social Change] Introduction and Chair, Yuta Sakuragi (Kyoto Univ.)
16:40	P-5 Estimation of spatial distribution pattern and its seasonal change of Baird's beaked whales in the waters around Japan based on a species distribution model ★B Shiho Furumaki, Hiroko Sasaki, Hikari Maeda, Shingo Minamikawa, and Yu Kanaji (Japan Fish. Res. Educ. Agey.)
17:00	P-6 Extinction risk assessment based on whole-genome analyses of spotted seals (<i>Phoca largha</i>) and ringed seals (<i>Pusa hispida</i>) rescued at the Okhotsk Tokkari Center ★B Momoka Suzuki, Yu Sato (Kyoto Univ.), Miku Watanabe (Okhotsk Tokkari Center), Miho Murayama, and Yoko Mitani (Kyoto Univ.)
17:20	P-7 Uplifting equity in science: Sea Otter impacts on traditional foods in Alaska ○Sonia Ibarra (Univ. Alaska Fairbanks, USA)
17:40	P-8 A Glimpse of Greenland's food through the eyes of researchers ○Yoko Mitani, Yuta Sakuragi, Sara Kim (Kyoto Univ.), Kotaro Yazawa (Hokkaido Univ.), Makoto Tomiyasu, Kohei Hasegawa, Jean-Baptiste Thiebot, Jun Uetake (Hokkaido Univ.), Ryo Kusaka (Hokkaido Museum of Northern Peoples), Naotaka Hayashi (Univ. Calgary, Canada), and Jun Akamine (Hitotsubashi Univ.)
19:00	Dinner Party with Volunteer Groups Mombetsu Central Hotel

9:00	[Q:Workshop, Career Development for Young Researchers in Arctic and Antarctic Research] Introduction and Chair, Shin Sugiyama (Hokkaido Univ.) <i>(in Japanese language only)</i> The ArCS-3 project conducts initiatives such as overseas assignments for young researchers, field training, research cruises, and special lectures to foster the next generation of scientists. This session will feature young researchers and graduate students who participated in these programs, researchers implementing similar initiatives, and individuals broadly involved in polar science education, and we will introduce efforts to cultivate the next generation. We hope young researchers will find this useful as they design their own career paths.
9:05	Q-1 Introduction to ArCS-3 program aimed at human resource development ○Monica Ogawa (NIPR)
9:15	Q-2 Educational programs of Hokkaido University in collaboration with ArCS III ○Shin Sugiyama (Hokkaido Univ.)
9:25	Q-3 Arctic cruise aboard the Floating Campus Oshoro-Maru -Focusing on the ArCSII&III public field training ○Fujio Ohnishi (Hokkaido Univ.)
9:35	Q-4 Swiss Alpine glacier fieldwork and its relevance to Polar research ○Tomoka Sugita (Hokkaido Univ.), and Pia Ataka (Chiba Univ.)
9:45	Q-5 Overview of a contamination survey of Blue Mussels influenced by dumpsites in northwestern Greenland ○Masaki Yamano (Hokkaido Univ.) Marine mammal field surveys in northwestern Greenland ○Sara Kim (Kyoto Univ.) Leveraging InSAR and field observations in revealing long-term post-fire permafrost evolution in North Yukon ○Zetao Cao (Hokkaido Univ.)
10:00	Q-6 Sasakawa Peace Foundation's Activities on Arctic Ocean capacity development ○Atsushi Watanabe (Sasakawa Peace Foundation), and Gunnar Rekvig (Arctic Univ. Norway, Norway/Sasakawa Peace Foundation)
10:15	Q-7 My career journey to date and future path ○Hisatomo Waga (Univ. Alaska Fairbanks, USA/NIPR)
10:25	Exchange of Opinions and Proposals from Young Stakeholders ○Monika Ogawa, and Atsushi Yoshida (NIPR)
10:50	Break

Wednesday 18 Feb. 2026**Hall, 1F, Arts & Culture Center**

11:00	【Closing Session】 •A Review of the Symposium •Prize-awarding Ceremony of the Aota Masaaki Award •Closing Remarks, Natsuhiko Otsuka (Chair of the Symposium Committee) Chair, Seiji Katakura (Mombetsu City)
12:00	Lunch
14:00 16:00	【Public Program, Symposium on the Forest-Ocean Linkage】 <i>(in Japanese language only)</i> Current State of Cutting-Edge Forestry - Development of High-Hardness Materials Using Densification Technology Applied to Larch-- Opening Remarks: Masatoshi Nakamura (Mombetsu City) Lecture I. Background and objectives of the densification technology Takanobu Sasaki (Hokkaido Univ.) II. Manufacturing methods and fundamental properties of densified larch wood Naoyuki Furuta (Forest Products Res. Inst.) III. Strength testing of furniture joints made from densified larch wood Yuka Tsukamoto (Hokkaido Univ.) IV. Chair development and commercialization using densified larch wood Yuichiro Yamagami (Yamagami Mokko Co., Ltd.) Pannel Discussion

Wednesday 18 Feb. 2026**Mombetsu Municipal Museum**

13:30 17:20	【Public Program, The Okhotsk Terroir Symposium 2026 in Mombetsu】 <i>(in Japanese language only)</i> Chair Shin'ichi Chonan (Okhotsk Terroir) -The Message Left by the Okhotsk Culture: Exploring the Origins of Okhotsk Culture and the Future and Potential of Okhotsk Tourism: Part 3- Convener Remarks: Hiroshi Daikoku (Okhotsk Terroir) Part 1 Exploring Ideas for Sharing Okhotsk with the World through Practical Reports from Various Fields Lecture: I. Tourism utilizing archaeological sites Masahiko Tasai (Cultural Heritage Support) II. On publishing travel with Jomon art Kyoko Shimizu (Kyuryudo Publishing) III. The potential of a journey exploring Okhotsk culture Aasami Miyashita (Hokkaido Univ.) IV. On the future of eastern Hokkaido Takuro Nakanishi (Dot Eastern Hokkaido) Part 2 Pannel Discussion
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Monday 16 - Wednesday 18 Feb.**Exhibition****Lobby, 3F, Art & Culture Center**

	【Extra】 Ex-1 End of the Kuroshio large meander in 2017-2025 Takao Nakajin (Tokai Univ.) Ex-2 Centennial of the Hakuai Maru Incident, The Crab Cannery Ship Novel-The history of canned crab and Mombetsu Masaya Yamada (Hokkaido Assoc. Protection of Cultural Property)
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Wednesday 18 Feb. 2026**Mombetsu Citizens' Public Hall**

13:10 14:30	【Symposium on Sea Ice for Children】 <i>(in Japanese language only)</i> I. Sea ice, the Sea of Okhotsk, and earth's environment Chair, Hajime Takahashi (Mombetsu City) Natsuhiko Otsuka (Okhotsk Sea Ice Museum) II. Life in the Arctic Richard Paton, and Geneva Noble (Mar. Wildlife Stewardship, Qikiqtani Inuit Assoc., Canada) Drift Ice Quiz
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【Exhibition】

Okhotsk Story 7 Photo Exhibition – Precious Moments

With the aim of sharing the appeal of the Okhotsk region with people in Hokkaido and beyond, this exhibition presents the region's distinctive natural landscapes, flora, and fauna through a collection of uniquely expressive photographs.

40 年前…第 1 回の北方圏国際シンポジウムが開催されました。

1986年(昭和61年) 2月12日(水)～14日(金)

昭和40年、紋別市に設置された北海道大学低温科学研究所附属流氷研究施設の開設20周年記念および故田畑忠司教授の追悼式をかねて、国際シンポジウムを開催した。

開会式では野村委員長と金田市長が挨拶、横路孝弘 北海道知事、新沼浩 道議、真田真 北海道開発局長、山崎昭 海上保安庁水路部長、木村邦夫 水産庁研究部長、佐藤充克 北海道電気通信監理局長、長谷部純雄 北方圏センター専務、星合孝男 国立極地研究所教授、永田豊 東京大学教授らが祝辞を、更に「流氷研究施設開設20周年記念式典」開催に際して、木下誠一 北海道大学低温科学研究所長が謝辞をのべた。



式典ではアラスカ大学海洋研究所のベラ・アレキサンダー教授がモーツアルトの曲をピアノ演奏。米国極地工学研究所のW・F ウィークス博士がコントラバスの演奏を行い、故・田畑忠司教授を追悼した。ウィークス博士は田畑教授とは友人付き合いをしていた方で、ウィークス博士はワインシュタインの「二つのモーダルソロ」という曲を弾きながら、感慨深そうだった。

主 催： 北海道大学低温科学研究所
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オホーツク海沿岸海況漁況調査事業推進協議会

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