

Monday 17 Feb. 2025

Arts & Culture Center, 1F Hall

9:00	【Opening Session】 Opening Address: Natsuhiko Otsuka (Chair of the Symposium Committee) Explanation of the Aota Masaaki Award	Chair, Seiji Katakura (City of Mombetsu)
9:10	【A:Keynote Speech】 A-1 Overview of the Arctic research vessel “MIRAI II” ○Eisuke Akane (JAMSTEC)	
9:40	A-2 The Arctic: past, present, and future -Initiatives of the Sasakawa Peace Foundation- ○Atsushi Sunami (Sasakawa Peace Foundation)	
10:10	Break	
10:20	A-3 Ecological interactions between viruses and copepods: A study using continuous ocean monitoring in the Okhotsk Sea off Mombetsu ○Junya Hirai (Univ. Tokyo)	
10:50	A-4 Grand challenges and opportunities in a rapidly changing Arctic: Perspectives from Alaska ○Hajo Eicken, Nancy Fresco (Univ. Alaska, USA), Go Iwahana (Univ. Alaska, USA/ Hokkaido Univ., Japan), Igor Polyakov, Scott Rupp, Erik Schoen (Univ. Alaska, USA), Hisatomo Waga (Univ. Alaska, USA/NIPR, Japan) and Harmony Wayner (Univ. Alaska, USA)	
11:20	A-5 Prospects of polar research: Initiatives of the National Institute of Polar Research ○Yoshifumi Nogi (NIPR)	
11:50	Lunch	
	【B:Workshop, Arctic Research Activities and Future Plan by Asian and Arctic Institutions】	
13:30	Introduction and Chair, Yuji Kodama (Hokkaido Univ.)	
13:35	B-1 From HAI-FES to AANRE -Building a research and education network linking Asia and the Arctic- ○Shotaro Uto and Yuji Kodama (Hokkaido Univ.)	
13:55	B-2 Rapid Arctic change: International Arctic Research Center collaborations ○Hajo Eicken, Nancy Fresco (Univ. Alaska, USA), Go Iwahana (Univ. Alaska, USA/Hokkaido Univ., Japan), Igor Polyakov, Scott Rupp, Erik Schoen (Univ. Alaska, USA), Hisatomo Waga (Univ. Alaska, USA/ NIPR, Japan) and Harmony Wayner (Univ. Alaska, USA)	
14:15	B-3 TaiPI: A research and education platform to bridge scientific knowledge and global warming actions ○Chuen-Fa Ni, Hwa Chien, Slawomir Jack Giletycz, Whyjay Zheng, Ping-Yu Chang, Kao-Shen Chung, Pei-Chuan Chuang and Wei-Tzu Liu (Natl. Ctrl. Univ., Taiwan)	
14:35	B-4 Integrating and sustaining Arctic Ocean Observation Systems Hanne SAGEN, ○Stein Sandven1 Espen Storheim, (Nansen Environmental Remote Sensing Ctr. Norway), Matthew Dzieciuch, (Univ. California San Diego, USA), Arild Sundfjord, (Norwegian Polar Inst., Norway), Mathilde B. Sørensen, (Univ. Bergen, Norway), Jens Abrahamsen, Peter Skagen, (NAXYS TECH, Norway), Bjarte Langeland, Truls Munch-Ellingsen, (Stinger AS, Stavanger, Norway), Normen Lochthofen, Thomas Soltwedel (Alfred Wegner Inst. Mar. Polar Res. Germany) and Agnieszka Beszczynska-Möller (Inst. Oceanology Acad. Sci., Poland)	
14:55	Break	
15:05	B-5 We know the Arctic -Arctic Centre, University of Lapland, Finland ○Johanna Ikävalko (Univ. Lapland, Finland)	
15:25	B-6 TaiPI data repository: a Taiwan-based polar data infrastructure built for open science ○Whyjay Zheng (Natl. Ctrl. Univ., Taiwan)	
15:45	B-7 Arctic research at Nord University ○Kjell Stokvik (Nord Univ., Norway)	
16:05	B-8 Advancing Arctic Research: UAV mapping and geological insights in Svalbard and the role of Taiwan's Arctic station in earth sciences ○Slawomir Jacek, Chuean-Fa Ni, Fang-Yi Tsai, Yue-Qi Chung, Ireneusz Sobota, Kamil Czarniecki, and Chian-Hwa (Natl. Ctrl. Univ., Taiwan)	
16:25	Discussion	

Monday 17 Feb. 2025**Arts & Culture Center, 3F Meeting Room**

【C: Sea Ice Region Engineering】	
13:30	C-1 Consideration of measurement methods for the characteristics of brash ice pieces in ice tank tests ○Keisuke Anzai, Shigeya Mizuno and Yutaka Yamauchi (Technical Res Ctr., Japan Mar. United Corp.)
13:50	C-3 Examination of ship beset incident by sea ice volume convergence ○Natsuhiko Otsuka (Hokkaido Univ./Sasakawa Peace Foundation)
14:10	C-2 A Framework and trial calculations of navigability assessment of ships in ice waters ○Shotaro Uto (Hokkaido Univ.) and Natsuhiko Otsuka (Okhotsk Sea Ice Museum)
14:30	Break
【D: Biogeochemistry】	
14:40	D-1 Geochemical characteristics of particulate iron in the atmosphere and the sea ice in the southern Sea of Okhotsk ○★A Yuta Iwamoto, Aiko Murayama and Jun Nishioka (Hokkaido Univ.)
15:00	D-2 In situ observation of hyper spectral radiation at the Okhotsk Tower for validation of satellite measurements of ocean color ○Takafumi Hirata (Hokkaido Univ.), Natsuhiko Otsuka (Okhotsk Sea Ice Museum), Katsushi Iwamoto and Seiji Katakura (City of Mombetsu)
15:20	D-3 Seasonal variations of atmospheric organic aerosols by the continuous year-round measurements at the Okhotsk Tower in Mombetsu ○Yuzo Miyazaki, Eri Tachibana (Hokkaido Univ.), Hitomi Yoshida (Garinko&Tower Co., Ltd.), Zhengyang Fang (Hokkaido Univ.), Katsushi Iwamoto and Seiji Katakura (City of Mombetsu)
15:40	Break
【E: Snow, Ice and Human Life】	
15:50	E-1 How Do You Feel About the Arctic? Changing Emotional Representations of the Arctic in English Literature from 1500 to the Present ○Artem Suslov (Hokkaido Univ.)
16:10	E-2 Improving winter life in Sapporo: Proposals by Nitobe College graduate students and collaboration with the City of Sapporo ○Marina Lomaeva, Eman H.E. Toulbah, Chinatsu Igarashi, Atsuko Inoue, Emmilce A. Morillas, Taejun Son and Seralathan Dilushi (Hokkaido Univ.)
16:30	E-3 A comparative study of Arctic and northern indigenous tourism across three sites ○Juha Saunavaara and Takafumi Fukuyama (Hokkaido Univ.)
16:50	Break
17:00	E-4 Digital forestry solutions and data-based decision-making: Lessons from Hokkaido and Finland ○Juha Saunavaara (Hokkaido Univ.), Tuomo Puumalainen, Yoshito Shimizu (OY Arbonaut Ltd., Ltd., Finland) and Ram Avtar (Hokkaido Univ.)
17:20	E-5 Fluid Simulation Analysis of “Temperature-adjustable Bench” in Cold Regions -Nikko City Zero Carbon Promotion Project- ○★A Kouki Toyama, Reo Yamaguchi, Muhammad Najib Bin Roslan, Namie Umezaki, Chinari Watanabe (Utsunomiya Univ.), Abdulgaphur Abdulkhadar Athani (Univ. Malaya, Malaysia), Mohd Ridha Bin Muhamad (Utsunomiya Univ.), Noriyoshi Yokoo (Univ. Tech. Malacca, Malaysia) and Kei Horio (Utsunomiya Univ.)

Monday 17 Feb. 2025**Mombetsu Municipal Museum**

【F: Workshop, Emerging Changes in the Coupled Polar Climate Systems】	
13:00	Introduction and Chair, Jun Inoue (NIPR)
13:05	F-1 Analysis of extreme warming events for annual observation at Dome Fuji, inland station of the East Antarctica ○Kyohei Yamada (NIPR), Jun Inoue and Naohiko Hirasawa (NIPR/SOKENDAI)
13:25	F-2 Modeling the supercooled liquid water clouds in the mid-troposphere over the Southern Ocean ○Jun Inoue, Kazutoshi Sato (NIPR/SOKENDAI), Kyohei Yamada (NIPR), Masashi Niwano (Meteorological Res. Inst., JMA), Hitoshi Matsu (Nagoya Univ.), Jan Landwehrs, And Annette Rinke (Alfred Wegener Inst., Germany)
13:45	F-3 Causes of the abrupt and sustained 2016–2023 Antarctic sea-ice decline: A sea ice–ocean model study ○Kazuya Kusahara and Hiroaki Tatebe (JAMSTEC)
14:05	Break

Monday 17 Feb. 2025

Mombetsu Municipal Museum

[F:Workshop, Emerging Changes in the Coupled Polar Climate Systems]	
	Chair, Kyohei Yamada (NIPR)
14:15	F-4 Predictability of sensor icing caused by supercooled fog in polar ocean operations ○Souichiro Sueyoshi (Nippon Mar. Enterprises, Ltd.)
14:35	F-5 Verification of temperature forecasts by observations during an Arctic cruise of R/V Mirai in November 2018 and analysis of positive error cases around the marginal ice zone ○Akio Yamagami (Ctr. Environmental Sci. Saitama), Takahiro Toyoda (Meteorological Res. Inst., JMA) and Jun Inoue (NIPR)
14:55	F-6 Impact of anthropogenic aerosols on Arctic amplification in a long-term future climate using a climate model ○Jun Ono (NIPR), Manabu Abe, Hiroaki Tatebe and Yoshiki Komuro (JAMSTEC)
15:15	Break
	Chair, : Takahiro Toyoda (Meteorological Res. Inst., JMA)
15:25	F-7 Variations of current velocities in the Bering Strait in winter: Influences of local Ekman transport and inter ocean sea level difference detected by surface wind and sea ice velocities. ○★A Kohei Hayakawa and Koji Shimada (Tokyo Univ. Mar. Sci. Tech.)
15:45	F-8 Decadal variation in sea ice meltwater amount in the Beaufort Gyre and its relationship with Arctic multi-year ice loss ○★A Y. C. Chen, Vigan Mensah and Kay. I. Ohshima (Hokkaido Univ.)
16:05	F-9 Mechanisms of winter SST variations in the subpolar North Atlantic Ocean: Influences of Arctic sea ice discharge and Gulfstream ○★A Hirotomoto Takahashi and Koji Shimada (Tokyo Univ. Mar. Sci. Tech.)
16:25	Break
	Chair, Kazuya Kusahara (JAMSTEC)
16:35	F-10 Variation mechanism and predictability of early winter sea ice in the Barents and Kara Seas in new Arctic climate regime after 2008 ○★A Kanata Oishi and Koji Shimada (Tokyo Univ. Mar. Sci. Tech.)
16:55	F-11 A variation in the sea ice area in the East Siberian Sea in summer ○★A Rin Harada and Koji Shimada (Tokyo Univ. Mar. Sci. Tech.)
17:15	F-12 Sensitivity of the Arctic sea ice representation to the ice thickness category resolution in an OGCM ○Takahiro Toyoda, L. Shogo Urakawa, Kei Sakamoto, Yuma Kawakami, Kunihiro Aoki, Hideyuki Nakano, Yuhei Takaya, Katsuya Toyama, Naohiro Kosugi, Yoshiteru Kitamura and Masao Ishii (Meteorological Res. Inst., JMA)
17:35	Discussion

Tuesday 18 Feb. 2025

Arts & Culture Center, 1F Hall

[G:Workshop, Interactions between the Antarctic Ice Sheet and the Global Climate System]	
9:00	Introduction and Chair, Shuntaro Hyogo (Hokkaido University)
9:05	G-1 Subglacial lake activities in the Shirase drainage basin, east Antarctica, during 2010-2023 ○Ken Kondo (Nagoya Univ.) and Masahiro Minowa (Hokkaido Univ.)
9:25	G-2 High-resolution estimation of sea-ice melt amount in the Southern Ocean, comparing with the climatology of the ice melt amount ○★A Mizuki Komatsu, Kay I Ohshima (Hokkaido Univ.), Noriaki Kimura (Univ. Tokyo.), Sohey Nihashi (Hokkaido Univ./Ntl. Inst. Tech. (KOSEN), Tomakomai), Masakazu Fujii (NIPR/SOKENDAI), Masashi Machida (Hokkaido Univ.) and Takeshi Tamura (NIPR/SOKENDAI)
9:45	G-3 Development of Weddell Sea regional model ○★A Hiroki Moriyoshi (Hokkaido Univ.), Yoshihiro Nakayama (Dartmouth College, USA), Mathias van Caspel, Markus Janout (Alfred Wegener Inst., Germany) and Alena Malyarenko (Univ. Canterbury, New Zealand) Masakazu Fujii, Takeshi Tamura (NIPR/SOKENDAI), Ayako Abe-Ouchi (Univ. Tokyo) and Shigeru Aoki (Hokkaido Univ.)

Tuesday 18 Feb. 2025**Arts & Culture Center, 1F Hall**

	[G:Workshop, Interactions between the Antarctic Ice Sheet and the Global Climate System]
10:05	G-4 Development of the ocean model with improved reproducibility of thermocline and halocline off Totten Glacier, Antarctica <ul style="list-style-type: none"> ○★A Shuntaro Hyogo (Hokkaido Univ.), Yoshihiro Nakayama (Dartmouth College, USA), Masakazu Fujii, Takeshi Tamura (NIPR/SOKENDAI), Ayako Abe-Ouchi (Univ. Tokyo) and Shigeru Aoki (Hokkaido Univ.)
10:25	Break
10:35	G-5 Impact of wind stress changes on the Antarctic Circumpolar Current -A comparison between 50 km and 5 km resolution models- <ul style="list-style-type: none"> ○★A Shinnosuke Yoshida and Takuro Matsuta (Hokkaido Univ.)
10:55	G-6 Impact of ocean physical conditions on atmospheric CO2 concentration at the last glacial maximum <ul style="list-style-type: none"> ○Miyano Nishida, Akira Oka (Univ. Tokyo.) and Hidetaka Kobayashi (Univ. Toyama),
11:15	G-7 Precipitation isotope variations in inland Antarctica influenced by daily-scale precipitation <ul style="list-style-type: none"> ○Kanon Kino, Alexandre Cauquoin (Univ. Tokyo), Atsushi Okazaki (Inst. Advanced Acad. Res.), Taikan Oki and Kei Yoshimura (Univ. Tokyo)
11:35	Lunch
	[H: Meteorology, Climate, and Physical Oceanography]
13:00	H-1 Detection of extremely weak precipitation in Rikubetsu, inland Hokkaido, Japan <ul style="list-style-type: none"> ○Naohiko Hirasawa (NIPR/SOKENDAI) and Hiroyuki Konishi (Osaka Kyoiku Univ.)
13:20	H-2 Estimation of visibility from mass flux of snow at weather stations in Hokkaido <ul style="list-style-type: none"> ○Yuji Miki and Youmei Kawamura (Wakkanai Meteorological Office, JMA)
13:40	H-3 Ice floe movements around bridge piers during the event of winter-season tsunami run-up into rivers <ul style="list-style-type: none"> ○Takaaki Abe (Civil Engineering Res. Inst. Cold Region) and Yasuhiro Yoshikawa (Kitami Inst. Tech.)
14:00	Break
14:10	H-4 Decadal changes of water mass properties in the Bering Sea from 2007 to 2022 <ul style="list-style-type: none"> ○Hung-Wei Shu (JAMSTEC/Japan Fish. Res. Educ. Agcy.), Takuya Nakanowatari, Tomohiro Azumaya, Kentaro Honda, Tomoki Sato, Shunpei Sato (Japan Fish. Res. Educ. Agcy.), Hiroaki Tatebe, Shinya Kouketsu (JAMSTEC), Humio Mitsudera (Hokkaido Univ.), Takao Kawasaki (Univ. Tokyo), Yoshihiro Nakayama (Dartmouth College, USA), Sinichiro Kida (Kyushu Univ.), Tomohiro Nakamura (Hokkaido Univ.), Kiyoshi Tanaka (Univ. Tokyo), Hiroshi Kuroda (Japan Fish. Res. Educ. Agcy.)
14:30	H-5 Unprecedented oceanographic conditions in October 2024 around the Oyashio and Coastal Oyashio off the southeastern coast of Hokkaido, Japan <ul style="list-style-type: none"> ○Hiroshi Kuroda, Yukiko Taniuchi and Takuya Nakanowatari ((Japan Fish. Res. Educ. Agcy., Kushiro)
14:50	H-6 Preliminary drifting buoy observations of the ice-free zone phenomenon in the Gulf of Patience in 2023 <ul style="list-style-type: none"> ○Hwa Chien, Li-Ching Lin, An-Shi Wang and Huang-Meng Chang (Natl. Ctrl. Univ., Taiwan)
15:10	H-7 Nonlinear flexural-gravity wave in arctic sea <ul style="list-style-type: none"> ○Hung-Chu Hsu and Hung-Yu Huang (Natl. Sun Yat-Sen Univ., Taiwan)
19:00	Dinner Party with Volunteer Groups

Tuesday 18 Feb. 2025**Arts & Culture Center, 3F Special Conference Room**

	[I:Workshop, The Changing Ice-Covered Ocean and New Utilization]
9:00	Introduction, Takuji Waseda (Univ. Tokyo)
9:05	I-1 New technology for the simultaneous monitoring of sea ice thickness and overlying snow depth <ul style="list-style-type: none"> ○Jeremy Wilkinson (British Antarctic Survey, UK), Danny Hills, Rauan Khangerey, Becan Lawless and Liam Marsh (Univ. Manchester, UK)
9:25	I-2 Understanding the impact of predicted changes in sea ice on the under-ice lightscape within the Sea of Okhotsk <ul style="list-style-type: none"> ○★A Gaëlle Veyssièrè (British Antarctic Survey/Univ. College London, UK), Daiki Nomura (Hokkaido Univ.), Tomonori Tanikawa (Meteorological Res. Inst., JMA), Takenobu Toyota (Hokkaido Univ.), Takahiro Toyoda (Meteorological Res. Inst., JMA), Hiroyuki Enomoto (NIPR) and Jeremy Wilkinson (British Antarctic Survey, UK)

[I: Workshop, The Changing Ice-Covered Ocean and New Utilization]	
9:45	<p>I-3 Investigation of a method for extracting deformed ice using machine learning on high-resolution SAR images ○Kentarō Ono and Akihisa Konno (Kogakuin Univ.)</p>
10:05	<p>I-4 A new method for deriving sea ice thickness based on sea ice history using satellite data ○Noriaki Kimura and Hiroyasu Hasumi (Univ. Tokyo.)</p>
10:25	Break
10:35	<p>I-5 A Polar Oceans Shipping Information System Michael A.S. Thorne (British Antarctic Survey, UK), Franz von Bock und Polach (Hamburg Univ. Tech., Germany), Andreas Cziferszky, Andrew Fleming, Dougal Goodman (British Antarctic Survey, UK), Takashi Kikuchi (JAMSTEC), Tsubasa Kodaira, Kohei Mikami, Hideaki Murayama (Univ. Tokyo), Junji Sawamura (Osaka Univ.), Mikko Suominen (Aalto Univ., Finland), Alex J. Tate (British Antarctic Survey, UK), Jukka Tuhkuri (Osaka Univ.), Peter Wadhams (Univ. Cambridge, UK), Takuji Waseda (Univ. Tokyo) and Jeremy Wilkinson (British Antarctic Survey, UK)</p>
10:55	<p>I-6 Fundamental calculation of ship hull deformation during continuous icebreaking - Structural response in different ice pressure area - ○★A Aoi Genda and Junji Sawamura (Osaka Univ.)</p>
11:15	<p>I-7 Experimental investigation of ship longitudinal response in small ice floes and wave interaction ○Junji Sawamura (Osaka Univ.), Akihisa Konno and Taiki Tokudome (Kogakuin Univ.)</p>
11:35	<p>I-8 Relationship between sea ice thickness and ramming frequency in drift ice and fast ice of Lützow-Holm Bay, East Antarctica ○★A Shotaro Muraoka and Kazutaka Tateyama (Kitami Inst. Tech.)</p>
11:55	<p>I-9 Simulation for icebreaking navigation of icebreaker “Shirase” ○★A Yukihide Ishiyama, Tsubasa Kodaira, Takehiko Nose, Kohei Mikami (Univ. Tokyo), Kazutaka Tateyama (Kitami Inst. Tech.) and Takuji Waseda (Univ. Tokyo)</p>
12:15	Lunch
13:30	<p>I-10 A preliminary calculation of design ice load for offshore wind power generation facility using ice, meteorological and satellite data ○★A Yusuke Kohama, Kazutaka Tateyama (Kitami Inst. Tech.) and Shotaro Uto (Hokkaido Univ.)</p>
13:50	<p>I-11 Numerical method for quantitative evaluation of ice accretion on ship superstructures ○Kentarō Suizu, Akihisa Konno (Kogakuin Univ.) and Toshiro Ozeki (Hokkaido Univ. Educ. Sapporo)</p>
14:10	<p>I-12 Review of the latest ship activity along the Northern Sea Route -Cargo and voyages- ○Natsuhiko Otsuka (Hokkaido Univ./Sasakawa Peace Foundation) and Kjell Stokvik (Ct. High North Logistics, Norway)</p>
14:30	<p>I-13 Operational sea ice information services and Polar View - a UK perspective ○Andreas Cziferszky and Andrew Fleming (British Antarctic Survey, UK)</p>
14:50	<p>I-14 Arctic Shipping and Global Greenhouse Gas Pricing: A Simulation with Computational General Equilibrium and Simple Climate Model- ○Trang Tran and Ryuichi Shibasaki (Univ. Tokyo)</p>
15:10	<p>I-15 Production of navigation support information in the ice-covered sea using satellite data based on in-situ sea ice observations ○Kazutaka Tateyama (Kitami Inst. Tech.), Akihisa Konno (Kogakuin Univ.), Koh Izumiyama (Hokkaido Univ.), Genki Sagawa (Weathernews) and Motomu Oyama (NIPR)</p>
15:30	Break
15:40	<p>I-16 Granular approach for continuum modeling of sea ice ○Félix St-Denis, L. Bruno Tremblay (McGill Univ. Canada), Damien Ringeisen, Jean-François Lemieux and Mathieu Plante (Environment and Climate Change Canada, Canada)</p>
16:00	<p>I-17 Material point method for modelling sea ice movement and breakup -MPM modelling of sea ice dynamics -- ○Igor Gribanov and Takuji Waseda (Univ. Tokyo)</p>
16:20	<p>I-18 Wind wave and swell evolution in the ice-covered southern Sea of Okhotsk under explosive cyclogenesis ○Takehiko Nose, Takuji Waseda, Tsubasa Kodaira (Univ. Tokyo), Yasushi Fujiwara (Kobe Univ.) and Takenobu Toyota (Hokkaido Univ.)</p>

Tuesday 18 Feb. 2025**Arts & Culture Center, 3F Special Conference Room**

	[I: Workshop, The Changing Ice-Covered Ocean and New Utilization]
16:40	I-19 2024 mid-term Arctic Sea ice forecast: comparison with observations ○Motomu Oyama (NIPR), Noriaki Kimura (Univ. Tokyo.) and Hironori Yabuki (NIPR)
17:00	Break
17:10	I-20 Estimation of sea ice thickness fluctuation around Greenland's Siorapaluk region using a thermodynamic model ○★A Yoshifumi Harada and Kazutaka Tateyama (Kitami Inst. Tech.)
17:30	I-21 Wave dissipation and spectral downshifting in ice: Experimental and numerical study with the Nonlinear Schrödinger Equation ○★A Koya Sato (Univ. Tokyo), Takuji Waseda (Univ. Tokyo/JAMSTEC) and Tsubasa Kodaira (Univ. Tokyo)
17:50	I-22 Short-term sea ice forecast for the whole Arctic Ocean using ice-ocean coupling model ○Yoshihiro Niwa, Motomu Oyama, Takeshi Sugimura and Hironori Yabuki (NIPR)
18:10	Discussion
19:00	Dinner Party with Volunteer Groups

Tuesday 18 Feb. 2025**Arts & Culture Center, 3F Meeting Room**

	[J: Workshop, Review of Tothe Arctic Governance by East-Asian Perspective]
9:00	Introduction and Chair, Sakiko Hataya (Sasakawa Peace Foundation)
9:05	J-1 Review of Japan's ocean policy: Toward the 5th basic plan on ocean policy ○Yuta Komori (Sasakawa Peace Foundation)
9:25	J-2 Japan's Arctic policy: Current status and challenges ○Sakiko Hataya (Sasakawa Peace Foundation)
9:45	J-3 From the JCAR long-term plan to ICARP IV and IPY5, Japan's potential for future polar research ○Hiroyuki Enomoto (NIPR)
10:05	J-4 Review of Russia's Northern Sea Route Regulation ○Natsuhiko Otsuka (Hokkaido Univ./Sasakawa Peace Foundation)
10:25	J-5 The role of epistemic community on Arctic governance ○Xiang Gao (Sasakawa Peace Foundation)
10:45	Break
10:55	J-6 Seventy years of Arctic discourses in Japan's national diet: From reactive to proactive engagement Fujio Ohnishi and ○Artem Suslov (Hokkaido Univ.)
11:15	J-7 Arctic 5 + 5: implementing the Central Arctic Ocean Fisheries Agreement ○Aileen Aseron Espiritu (UiT Arctic Univ. Norway, Norway)
11:35	J-8 Russia's international Arctic policy after the invasion of Ukraine: Experts' voices in the domestic media ○Marina Lomaeva (Hokkaido Univ.)
11:55	Lunch
	[K: Workshop, The Okhotsk Sea: Unique Weather and Climate Generated by the Earth's Cool Spot]
15:30	Introduction, Meiji Honda (Nigata Univ.)
15:35	K-1 Large-scale dynamics shaping the Aleutian Low ○★A Keisuke Morimoto (Univ. Tsukuba), Masaya Kuramochi (Japan Meteorological Agcy.) and Hiroaki Ueda (Univ. Tsukuba)
15:55	K-2 Influence of cut-off lows on quasi-stationary convective bands occurred in the Tohoku region ○★A Tomonari Tsumori, Meiji Honda and Naoya Takahashi (Nigata Univ.)
16:15	K-3 Long-term variations of temperature, salinity and volume transport in the Soya Warm Current and their relationships with the Japan Sea ○★A Mariko Honda, Kay I. Ohshima and Vigan Mensah (Hokkaido Univ.)
16:35	Break

Tuesday 18 Feb. 2025

Arts & Culture Center, 3F Meeting Room

	【K:Workshop, The Okhotsk Sea: Unique Weather and Climate Generated by the Earth's Cool Spot】
16:45	K-4 Weather records and climatic changes in northern Japan in the 1840s-50s ○Yoshio Tagami (Univ. Toyama) and Gaston Demarée (Royal Meteorological Inst. Belgium, Belgium)
17:05	K-5 Drift ice along the Sea of Okhotsk coast of Hokkaido during the IGY (1957-58) ○Shuheï Takahashi (Okhotsk Sea Ice Museum), Atsumu Omura (Swiss Federal Inst. Tech., ETH, Switzerland) and Natsuhiko Otsuka (Okhotsk Sea Ice Museum)
17:25	K-6 Sea ice records over more than a century at an observatory facing the Okhotsk coast of Hokkaido, Japan ○Takahiro Toyoda (Meteorological Res. Inst., JMA), Kento Tsukagawa (Abashiri Local Meteorological Office, JMA), Yusuke Kimura, Honoka Abe, Meiji Honda, (Niigata Univ.), Yuki Yamada, Miku Amano, Yoshihiro Tachibana, (Mie Univ.), Yuka Sawa, Keisuke, Morimoto, Hiroaki Ueda (Univ. Tsukuba), Katsushi Iwamoto (City of Mombetsu), Kimihiro Itoh (Sapporo Regional Headquarters), Fumitake Shido, (Wakkanai Local Meteorological Office, JMA), Hitoshi Tada, (Abashiri Local Meteorological Office, JMA), Hideki Kaneko (Fukui Local Meteorological Office, JMA), Katsuya Toyama, Naohiro Kosugi, Yusuke Ushijima and Masao Ishii (Meteorological Res. Inst., JMA)
19:00	Dinner Party with Volunteer Groups

Tuesday 18 Feb. 2025

Mombetsu Municipal Museum

	【L:Workshop, The Dynamics and Roles of Plankton in Boreal Waters】
9:00	Introduction and Chair, Junya Hirai (The University of Tokyo.)
9:05	L-1 Seasonal variation of diel vertical migration of zooplankton in the Soya Warm Current region observed by ADCP backscatter ○Mizuki Kuga, Atsushi Yamaguchi, Matsuno Kohei and K. I. Ohshima (Hokkaido Univ.)
9:25	L-2 Seasonal and interannual changes in zooplankton communities and size spectra at Mombetsu Port, Hokkaido in 2014 and 2021 ○★A Shuo Wang, Tsubasa Suga (Hokkaido Univ.), Hideaki Fujiya, Masaki Iwabuchi (Econix Co. Ltd.), Hiromi Kasai (Japan Fish. Res. Educ. Agcy.), Seiji Katakura (City of Mombetsu) and Atsushi Yamaguchi (Hokkaido Univ.)
9:45	L-3 Annual variability of size and bulk density of planktic foraminiferal tests in the western North Pacific ○Katsunori Kimoto and Rika Horiuchi (JAMSTEC)
10:05	L-4 Comparative Analysis of eDNA-based taxonomic assignment in micro eukaryotes from Mombetsu using different databases ○Satoshi Nagai (Japan Fish. Res. Educ. Agcy.), Noriko Nishi (Axiohelix) Junya Hirai (Univ. Tokyo.) and Seiji Katakura (City of Mombetsu)
10:25	L-5 Revealing hidden diversity of zooplankton under sea ice in the Okhotsk Sea ○Junya Hirai (Univ. Tokyo.), Atsushi Yamaguchi (Hokkaido Univ.) and Seiji Katakura (City of Mombetsu)
10:45	Break
	【M:Workshop, Current Status and Future Prospects of Fisheries Industry in Hokkaido, Japan】
10:55	Introduction and Chair, Makoto Hatakeyama (Abashiri Fisheries Research Institute, Hokkaido Res. Org.)
11:00	M-1 Current status of salmon fishery ○Hayato Saneyoshi (Salmon Freshwater Fish. Res. Inst.)
11:20	M-2 Economic seaweed in Hokkaido: Focusing on seaweed from Mombetsu ○★A Takahiro Arai (Wakkanai Fish. Res. Inst., Hokkaido Res. Org.)
11:40	M-3 Tracking Japanese Neon flying squid vessels in the Central North Pacific using Automatic Identification System (AIS) data ○★A Shintaro Ohno (Abashiri Fish. Res. Inst., Hokkaido Res. Org.), Hiroto Abe (Hokkaido Univ.), Hiromichi Igarashi (JAMSTEC) and Sei-Ichi Saitoh (Hokkaido Univ.)
12:00	M-4 Time-lapse videos reveal the unique behavioral patterns of Starfish ○★A Chitose Yamazaki (Abashiri Fish. Res. Inst., Hokkaido Res. Org.)
12:20	Lunch

<p>[M:Workshop, Current Status and Future Prospects of Fisheries Industry in Hokkaido, Japan]</p>	
13:30	<p>M-5 The role of Hokkaido and its fisheries associations in Japan-Russia fisheries relations ○Marina Lomaeva (Hokkaido Univ.) and Tatsuo Nakajima (Hokkaido Government)</p>
13:50	<p>M-6 The relationship between stock of Hokkai Shrimp (<i>padalus latirostris</i>) in Lake Saroma and prohibition on fishing since 2017 to 2023 ○Hiroya Okumura (Abashiri Fish. Res. Inst. Hokkaido Res. Org.), Nobuyuki Tanaka (Wakkanai Fish. Res. Inst. Hokkaido Res. Org.) and Takashi Ohashi (Yubetsu Fish. Coop.)</p>
14:10	<p>M-7 Sea cucumber aquaculture: current situation and new perspectives -New insights from sea cucumber aquaculture research in Hokkaido- ○Nobukazu Sato (Wakkanai Fish. Res. Inst., Hokkaido Res. Org.)</p>
14:30	<p>M-8 Bio-optical properties of salmon driftnet fishing sites inferred from field observation and satellite-derived ocean color data ○★A Yuki Iino, Tomoki Sato, Hayato Koyakumaru and Shunpei Sato (Fish. Resources Inst., Japan Fish. Res. Educ. Agcy.)</p>
14:50	<p>M-9 Bioeconomic trade-offs of future redistribution of fisheries resources in the Eastern Bering and Chukchi Seas ○Irene D. Alabia, Jorge Garcia Molinos, Takafumi Hirata (Hokkaido Univ.), Daiju Narita (Univ. Tokyo), and Toru Hirawake (NIPR/SOKENDAI)</p>
15:10	<p>Break</p>
<p>[N:Workshop, Environmental-social changes and seabirds and marine mammals]</p>	
15:20	<p>Introduction and Chair, Yoko Mitani (Kyoto University)</p>
15:25	<p>N-1 Evolution of marine mammal conservation and management, and the role of substate and non-state actors : The case of the North Pacific and Japan ○Marina Lomaeva (Hokkaido Univ.) and Yoko Mitani (Kyoto Univ.)</p>
15:45	<p>N-2 Collaborative study with Inuit on the foraging ecology of marine mammals in the Arctic ○★A Monica Ogawa (Hokkaido Univ.), Aqqalu Rosing-Asvid, Sascha Schiøtt (Greenland Inst. Natl. Resources, Greenland), Yuta Sakuragi (Hokkaido Univ.), Caroline Bouchard (Greenland Inst. Natl. Resources, Greenland /Univ. Laval, Canada), Evgeny Podolskiy, Shin Sugiyama (Hokkaido Univ.) and Yoko Mitani (Kyoto Univ.)</p>
16:05	<p>N-3 Underwater sounds of Arctic animals ○Evgeny A. Podolskiy, Mayuko Otsuki, Monica Ogawa, Kohei Hasegawa and Shin Sugiyama (Hokkaido Univ.)</p>
16:25	<p>N-4 Post-release behaviors and movements of juvenile spotted seals (<i>Phoca largha</i>) rehabilitated at the Okhotsk Tokkari Center: insights from satellite tracking ○★A Heping Li (Kyoto Univ.), Kay I Ohshima (Hokkaido Univ.), Satoko Okazaki (Okhotsk Tokkari Ctr.) and Yoko Mitani (Kyoto Univ.)</p>
16:45	<p>N-5 First track of Baird's beaked whales in the southern Sea of Okhotsk from autumn to winter ○Hiroyuki Sasaki, Hikari Maeda, Yu Kanaji (Fish. Resources Inst., Japan Fish. Res. Educ. Agcy.), Mari Kobayashi (Tokyo Univ. Agriculture/Mar. Wildlife Ctr. Japan), Shun Ikuta (Mar. Wildlife Ctr. Japan) and Kenji Konishi (Inst. Cetacean Res.)</p>
17:05	<p>N-6 Was offshore Hokkaido used as one of the refugia for killer whales (<i>Orcinus orca</i>) during the Last Glacial Maximum? ○★A Momoka Suzuki (Kyoto Univ.), Mami Kawai, Takashi Hayakawa (Hokkaido Univ.), Yuki F. Kita (Tokai Univ.), Motoi Yoshioka (Mie Univ.), Hiroshi Ohizumi (Tokai Univ.), Fumio Nakahara (Tokiwa Univ.), Shigeo Saino (Kobe Animals-and-Plants Environmental Col.), Tadasu K. Yamada, Yuko Tajima, Akira Shiozaki (Natl. Museum Nature Sci.), Shimpei F. Hiruta (Showa Univ.), Shin Nishida (Univ. Miyazaki), Masao Amano (Nagasaki Univ.), Yoshikazu Uni (Tokyo Univ. Agriculture), Ayaka T. Matsuda, Takashi F. Matsuishi (Hokkaido Univ.), Miho Murayama, Yu Sato and Yoko Mitani (Kyoto Univ.)</p>
17:25	<p>Break</p>
17:35	<p>N-7 Ingestion of plastics by little auks in northwestern Greenland across sea-ice conditions ○★A Hinata Kawamori, Mayuko Otsuki, Ryo Kusaka, Shin Sugiyama and Jean-Baptiste Thiebot (Hokkaido Univ.)</p>

Tuesday 18 Feb. 2025

Mombetsu Municipal Museum

	【N:Workshop, Environmental-social changes and seabirds and marine mammals】 Chair, Yoko Mitani (Kyoto Univ.)
17:55	N-8 Winter Bird Monitoring using a camera at the Okhotsk Tower in Mombetsu ○Toru Takeuchi, Yukinori Nakane, Shinichi Sakai (Ctrl. Res. Inst. Electric Power Indus.), Yuta Urabe (Okhotsk Garinko Tower Co., Ltd.), Katsushi Iwamoto and Seiji Katakura (City of Mombetsu)
18:15	N-9 Movement of juvenile black-eared kites after fledgling ○Kei Matsumoto (Kitami Inst. Tech.)
19:00	Dinner Party with Volunteer Groups

Tuesday 18 Feb. 2025

Machinaka Art Museum

	【O:Online Session】
15:00	O-1 About remote monitoring opportunities for natural disaster forecasting ○Ferdenant Mkrtychyan (Kotelnikov IRE, RAS Fryazino Branch, Russia)
15:20	O-2 Impact of wind on tides in the Kuril Straits ○Vsevolod Ilin (Lomonosov Moscow State Univ. /Shirshov Inst. Oceanology, Russia) and Victor Arkhipkin (M.V. Lomonosov Moscow State Univ., Russia)
15:40	O-3 Investigation of co-oscillating and independent tides in the Sea of Japan ○Ilin Vsevolod (Lomonosov Moscow State Univ. /Shirshov Inst. Oceanology, Russia), Victor Arkhipkin (M.V. Lomonosov Moscow State Univ., Russia) and Medvedev Igor (Shirshov Inst. Oceanology, Russia)
16:00	O-4 Environmental safety and development of environmentally sustainable shipping along the Northern Sea Route Olga Konovalova, Alexander Shestakov, Vladislav Kalenichenko, Alexey Skorina, Sergey Kirillov, ○Anita Dkhar and Nikolay Shabalin (Mar. Res. Center, Lomonosov Moscow State Univ., Russia)
16:20	O-5 Numerical modeling of iceberg-generated Tsunami ○Yi-Xuan Huang, Tso-Ren Wu, Pi-Chun Huang and Shu-Kun Hsu (Natl. Ctrl. Univ., Taiwan)
16:40	Break
	【P:Workshop, Doing Things the Right Way: What Role for Japan to Implement the Rights of Indigenous Peoples in the Arctic and Beyond?】
16:50	Introduction and Chair, Lindsay Arthur (Univ. Akureyri, Iceland)
19:00	Dinner Party with Volunteer Groups

Wednesday 19 Feb. 2025

Arts & Culture Center, 1F Hall

	【K:Workshop, The Okhotsk Sea: Unique Weather and Climate Generated by the Earth's Cool Spot】
9:00	K-7 Sea ice conditions in the Sea of Okhotsk in the 2023/2024 winter season ○Misa Komuro, Yoshikazu Fukuda, Keiji Hamada and Yuji Akasaka (Japan Meteorological Agcy.)
9:20	K-8 Relationship between snowfall in Niigata City and sea ice in the Okhotsk Sea ○Honoka Abe, Meiji Honda and Naoya Takahashi (Nigata Univ.)
9:40	K-9 Atmospheric characteristics associated with plain-type snowfall in Niigata Prefecture ○Yusuke Kimura, Meiji Honda and Naoya Takahashi (Nigata Univ.)
10:00	K-10 The influence of the Okhotsk high on widespread and long-lasting heavy rainfall ○Yuki Yamada, Yoshihiro Tachibana and Satoru Kasuga (Mie Univ.)
10:20	K-11 Influence of the Okhotsk Sea on weather and climate in Japan ○Meiji Honda (Nigata Univ.), Yoshihiro Tachibana (Mie Univ.), Takahiro Toyoda (Meteorological Res. Inst., JMA) and Hiroaki Ueda (Univ. Tsukuba)
10:40	Discussion
10:50	Break

Wednesday 19 Feb. 2025

Arts & Culture Center, 1F Hall

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 (City of Mombetsu)
12:00	Lunch	

Arts & Culture Center, 3F Lobby

	【Extra】 I. Johann August Miertsching and his circum-continental Travel as Inuit Language Interpreter on Board H.M.S. Investigator Gaston R. Demarée (Royal Meteorological Inst. Belgium, Belgium), Yoshio Tagami (Univ. Toyama) and Astrid E. J. Ogilvie (Stefansson Arctic Inst., Iceland/ Univ. Colorado, USA) II. Symphony of the ENSO - Correlations between sea level pressure and sea surface temperature- Takao Nakajin (Tokai Univ.) III. Scallop catch statistics for 126 years -Fishing and fish-processing industrie, economics Masaya Yamada (Hokkaido Industrial Archaeology Soc./Hokkaido Cultural Prop. Protection Assoc.)	
--	--	--

Monday 17 ~Tuesday 18 Feb. 2025

Arts & Culture Center, 3F Lobby

9:00 17:00	【Demonstration】 Experience of Forecasting Systems with a View to Arctic Observation - Introduction of Short- and Mid-term Forecasting Techniques - <i>by Arctic Sea Ice Information Center, National Institute of Polar Research, NIPR</i> As global warming progresses, temperatures are rising significantly, especially in the Arctic region. Consequently, the summer sea ice extent in the Arctic is decreasing, drawing attention to the use of the Arctic Passage. The Arctic Sea Ice Information Center has been providing mid-term and short-term sea ice forecasts, which are useful for navigating the Arctic Passage and observing the Arctic Ocean, to vessels operating in the Arctic and to the oceanographic research vessel "Mirai" to verify their effectiveness. The exhibit will present the latest information on these forecasts and the changes in oceans and sea ice, as well as their impacts. Let's think together about the current state of sea ice forecasting and global warming.	
--------------------	--	--

Public Program

Monday 17 Feb. 2025

Arts & Culture Center, 3F Meeting Room

13:30	【Public Program, Our Home Okhotsk Sea】 I. Current conditions and issues of scallop fishery in the Okhotsk Sea ○Yasufumi Hada (Abashiri Fisheries Research Institute, Hokkaido Research Organization) II. Current programs to conserve salmon populations ○Yasuyuki Miyakoshi (Kitami Salmon Enhancement Program Association, Abashiri, Japan)	<i>(in Japanese language only)</i>
-------	--	------------------------------------

Tuesday 18 Feb. 2025

Arts & Culture Center, 1F Hall

	【Public Program, Considering the Improvement of Disaster Response Capability in the Okhotsk Region -Learning from the Noto Peninsula Earthquake-】 <i>(in Japanese language only)</i> Chair, Shuji Mori (Abashiri Develop. Constr. Dept., Hokkaido Develop. Bu.)
16:00	Introduction, Otsuka Natsuhiko (Okhotsk Sea Ice Museum of Hokkaido/Symposium Committee)
16:05	Lecture 1 Preparing for a major disaster Hisayoshi Oba (Abashiri Develop. Constr. Dept., Hokkaido Develop. Bu.)
16:15	Lecture 2 How to achieve a health-preserving evacuation Masahiro Nemoto (Japanese Red Cross Hokkaido College of Nursing)
16:55	Break
17:05	Panel Discussion “Local Thoughts for Improving Disaster Response Capabilities” Coordinator, Masahiro Nemoto (Japan Red Cross Hokkaido College of Nursing) [Panelists] Kenzo Kasai (Abashiri Local Meteorological Observatory, Japan Meteorological Agency) Daisuke Kubo (Shokotsu Junior High School, City of Mombetsu) Yuko Kinoshita (Mombetsu City Social Welfare Council) Ryo Hamada (Hokkaido Okhotsk General Promotion Bu.) Makoto Ishikawa (City of Mombetsu) Review, Masahiro Nemoto (Japan Red Cross Hokkaido College of Nursing)
18:00	Closing Remarks, Takehiko Suzuki (Abashiri Develop. Constr. Dept., Hokkaido Develop. Bu.)

Wednesday 19 Feb. 2025

Arts & Culture Center, 1F Hall

14:00	【Public Program, Symposium on the Forest-Ocean Linkage】 <i>(in Japanese language only)</i> Introduction, Masatoshi Nakamura (City of Mombetsu)
16:00	

Wednesday 19 Feb. 2025

Mombetsu Municipal Museum

13:30	【Public Program, The Okhotsk Terroir Symposium 2025 in Mombetsu】 <i>(in Japanese language only)</i> Introduction, Hiroshi Daikoku (Okhotsk Terroir) Part 1 Keynote Speech Part 2 Lecture Part 3 Free Discussion
-------	--

Wednesday 19 Feb. 2025

Mombetsu Citizens' Public Hall

13:10 14:30	【Symposium on Sea Ice for Children】 <i>(in Japanese language only)</i>
---------------------	---

Saturday 15 Feb. ~ Sunday 23 Mar.

Okhotsk Sea Ice Museum

	【Public Program, Poster Exhibition】
--	--