

# Pacific Arctic Group (PAG) 2025 Fall Meeting Report



November 3-4, 2025  
Korea Polar Research Institute  
Incheon, South Korea  
<http://pag.arcticportal.org/>



Korea Polar Research Institute

The Pacific Arctic Group (PAG) is a group of institutes and individuals having a Pacific perspective on Arctic science. Organized under the International Arctic Science Committee (IASC), the PAG has as its mission to serve as a Pacific Arctic regional partnership to plan, coordinate, and collaborate on science activities of mutual interest. For the purpose, we have Spring and Fall meetings. The Spring PAG meeting is held during Arctic Science Summit Week and is focused on business issues and an update on research plans for the coming field season. The Fall PAG meeting is hosted at various locations in alternating PAG countries after the field season and is focused on review of accomplishments during the previous summer and outlooks for the future. The **PAG 2025 Fall Meeting** was hosted at the Korea Polar Research Institute in Incheon, South Korea, and reported on plans for field activities in 2026 and beyond, highlighted science results from PAG endorsed projects (DBO, PACEO, CAO), joint research activities, interactions with other organizations and projects, PAG organizational issues and other business issues.



## 1. Welcome and overview



The meeting began with an introduction by PAG chair Eun Jin Yang. She welcomed attendees and provided an overview of PAG including its purpose, role, and endorsed activities. The meeting agenda was reviewed and participants briefly introduced themselves.

## 2. Country reports



### Canada – Bill Williams (DFO-MPO)

The presentation provided an overview of current research programs and monitoring activities in the Canadian Arctic, including the Beaufort Gyre Observing System Study, Canada’s UNCLOS Program, the Kitikmeot Sea Science Study, the Beaufort Shelf Marine Observatories, the Canadian Beaufort Sea - Marine Ecosystem Assessment, and the Barrow Strait Monitoring Program.



### Japan – Motoyo Itoh (JAMSTEC)

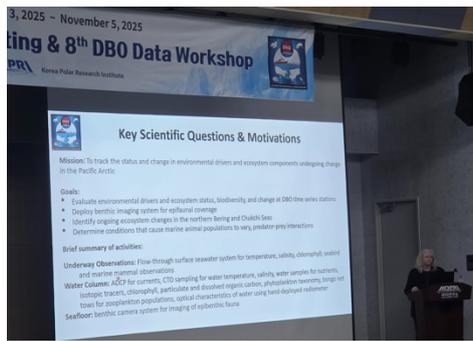
The presentation provided an update on Japan’s recent research activities conducted on board RV *Mirai*. The 2025 Arctic cruise was the final voyage of the RV *Mirai* after it completed 23 Arctic cruises from 1998 to 2025. In addition to scientific activities, the expedition emphasized public outreach, with live broadcasts streamed online via YouTube, allowing audiences to follow the scientific activities in real time. While there will be no Arctic research cruise in 2026, a short cruise to the Bering Strait is planned for 2026 on board the TR/V

Oshoro-maru.



### Korea – Eun Jin Yang (KOPRI)

The presentation summarized the wide range of research activities conducted in July and August 2025 on board the icebreaker IBRV *Araon*, focusing on the Korea–Arctic Ocean Warming and Responses of Ecosystem (K-AWARE) project. The Arctic Ocean expedition will take place in August and September in 2026, and the next generation icebreaking research vessel is expected to make its first voyage to the North Pole in 2030.



**USA - Jackie Grebmeier (UMCES)**

The presentation provided an overview of the various American research activities conducted in 2025 in the Pacific Arctic region, including the collaborative DBO-EcoFOCI-AMBON-CEO cruise effort, which brings together multiple research programs to study ecosystem processes and oceanographic conditions. The presentation also highlighted progress within several projects, such as the Bering Strait mooring project, the monitoring of the Arctic Boundary Current, and the Arctic Mobile Observing System

project.

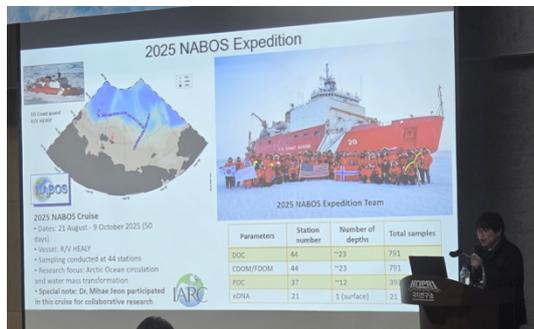
**3. PAG-related joint research activities**

3a. Distributed Biological Observatory (DBO)



**Pacific DBO Activities 2025 and 2026 plans – Jackie Grebmeier (UMCES)**

Jackie Grebmeier highlighted recent findings from sampling conducted within the Distributed Biological Observatory (DBO) regions. These results included time-series observations of macrofaunal biomass and dominant taxonomic groups in the northern Bering Sea and the Chukchi Sea, providing insight into ecosystem changes in these highly productive Arctic areas. She also reported on the 2025 Arctic Collaborative Ecosystem Cruise, which took place aboard the RV Sikuliaq in August 2025.



**KOPRI’s Contribution to DBO: Current Status and Future Plans - Jinyoung Jung (KOPRI)**

The presentation summarized Korea Polar Research Institute’s decade-long contribution to the Distributed Biological Observatory (DBO), highlighting annual surveys at DBO3 on board IBRV Araon. It presented key findings from long-term observations, including a major phytoplankton bloom and nutrient collapse in 2022–2023 that significantly altered carbon dynamics, and introduced the expansion of monitoring through the Siberian DBO line and new collaborative Arctic expeditions.

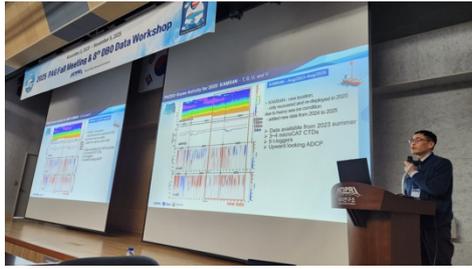


**Atlantic DBO activities and Pan-Arctic DBO – Monika Kedra (IOPAN) & Christina Goethel (UMCES)**

The presentations highlighted long-term Arctic monitoring efforts based on national programs led by European organizations. These programs provide 10–30+ year time series that monitor Atlantic inflow, Arctic outflow, and the progression of Atlantification across open-ocean, coastal, and fjord environments. The talks also described the expanding pan-Arctic network of the Distributed Biological Observatory (DBO), which connects four regional systems built on these long-term monitoring sites to strengthen international collaboration and multidisciplinary observations.

In addition, the proposed Marine Organic Carbon Atlas (MOCA) initiative was introduced as a future effort to develop coordinated Arctic datasets on marine organic carbon through improved collaboration, standardized metadata, and integrated observing systems.

### 3b. Pacific Arctic Climate Ecosystem Observatory (PACEO)



#### **Update from KOPRI physical oceanography activities – Kyoung-Ho Cho (KOPRI)**

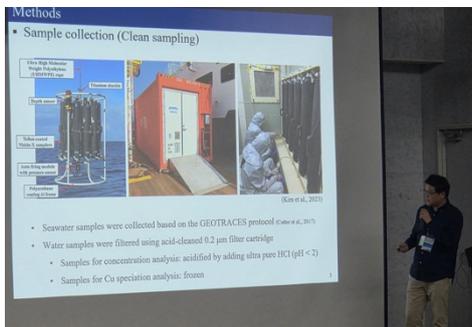
The presentation summarized KOPRI's contributions to PACEO, a monitoring program established to study marine environmental change linked to Arctic warming in the Beaufort Gyre region. Annual expeditions using the IBRV Araon collect physical oceanographic data obtained in part through the Korea Arctic Mooring System (KAMS), with ongoing work examining Beaufort Gyre influence and eddy activity.



#### **Update from KOPRI biological oceanography activities – Jee-Hoon Kim (KOPRI)**

The presentation summarized the major biological observations from the 2025 Arctic cruise conducted in July and August aboard the IBRV Araon. It provided an overview of biological oceanography studies, highlighting field activities focused on phytoplankton community structure and physiology,

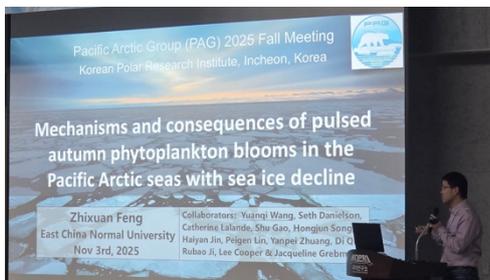
mesozooplankton community dynamics and grazing, and observations of fish and benthic organisms. The presentation also showed key results published in 2025 and emphasized the importance of international collaborations supporting these multidisciplinary Arctic ecosystem studies.



#### **Arctic Ocean trace metal activities – Taejin Kim (PNU)**

The presentation highlighted that trace metals, including manganese, zinc, copper, and cadmium, may influence phytoplankton growth and community structure. Because of this, understanding the biogeochemical cycles of trace metals is important. The presentation discussed the distribution of dissolved trace metals and the organic complexation of copper in the western Arctic Ocean. The results indicated that copper

concentrations in the Chukchi Sea are not toxic to phytoplankton, suggesting that copper availability is regulated by organic complexation in this environment.

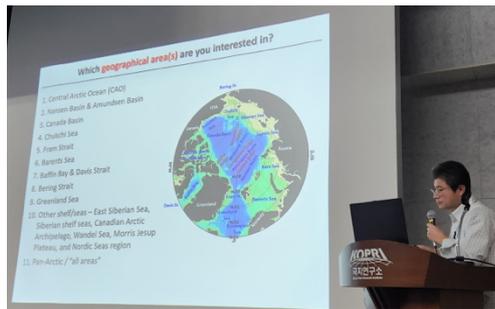


#### **Mechanisms and consequences of pulsed autumn phytoplankton blooms in the Pacific Arctic seas with sea ice decline – Zhixuan Feng (ECNU)**

The presentation showed how declining sea ice is reshaping phytoplankton bloom patterns in the Pacific Arctic, leading to more frequent autumn blooms and the lengthening of the growing season. These new autumn blooms are driven mainly by

physical processes, such as strong northerly winds linked to the Siberian High, enhancing ocean mixing and bringing nutrients to the surface. Occurring widely across Arctic shelf regions, these changes signal shifts in ecosystem timing and could significantly affect both plankton communities and seafloor ecosystems.

### 3c. Central Arctic Ocean (CAO)



#### **Brief updates on the WGICA and CAOFA JPSRM – Shigeto Nishino (JAMSTEC)**

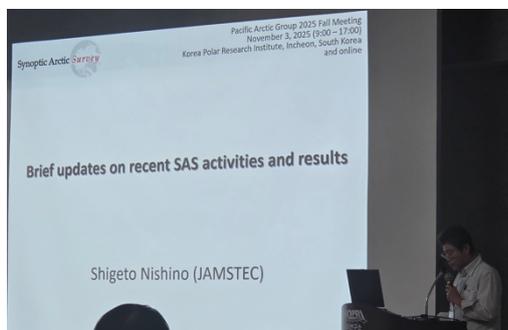
The WGICA and the CAOFA JPSRM are coordinating international efforts to monitor the Central Arctic Ocean, with active involvement from organizations like ICES, PICES, and the Arctic Council. Priorities for 2026–2028 include climate scenarios, potential for commercial species, and impacts on vulnerable habitats, to be refined at the 2025 Yokohama meeting and shared for broader input. The program supports science-based management drawing on coordinated observations from initiatives like SAS and DBO, which help identify key areas for urgent monitoring.



#### **CAOFA 4th COP Update – Jihoon Jeong (KOPRI)**

The presentation summarized outcomes of the 2025 CAOFA COP4 meeting, highlighting progress in implementing the agreement to prevent unregulated fishing in the Central Arctic Ocean. Key points included advancing scientific research, ongoing negotiations on exploratory fishing rules, and continued work on defining vulnerable ecosystems, improving data sharing, and strengthening international cooperation. Climate change impacts and the inclusion of Indigenous knowledge were also emphasized as ongoing priorities.

### 3d. Synoptic Arctic Survey (SAS)



#### **Brief updates on recent SAS activities and results – Shigeto Nishino (JAMSTEC)**

The presentation summarized recent activities of the Synoptic Arctic Survey (SAS) and planning for SAS-II, based on a community survey of scientific priorities and methods. SAS-II will build on SAS-I by expanding observations beyond physical, biogeochemical, and ecosystem studies to include atmosphere–ice–ocean interactions and modeling, using new tools like chemical tracers and omics approaches. Core themes include tracking long-term Arctic change, freshwater dynamics, Atlantification, and ecosystem shifts, with particular attention to microbial and viral processes and their links to climate.



#### **US SAS activities and plans - Jackie Grebmeier (UMCES) and Carin Ashjian (WHOI)**

The presentation outlined US activities and plans for the Synoptic Arctic Survey, emphasizing the importance of North Pole transects in filling key data gaps across the Arctic Basin. Future efforts will focus on comparing shelf–basin and inter-basin differences and advancing pan-Arctic synthesis. It also highlighted the need for international coordination, multidisciplinary observations, and integration of atmospheric, physical, chemical, and biological data to better understand ecosystem changes.

#### 4. Updates on proposed international research activities



##### Cross cutting proposal for SAS ECR activities – Christina Goethel (UMCES)

The presentation introduced the Synoptic Arctic Survey Early Career Researchers (SAS ECR) group, a small but active network of early career scientists involved in SAS and future SAS-II efforts. The group is developing discipline-specific collaborations and focusing on interdisciplinary research. Key activities include organizing a SAS ECR workshop at ASSW 2026 in Aarhus, Denmark to develop joint proposals and science priorities, as well as promoting training and cruise opportunities.



##### 2nd International Workshop on Arctic Ocean Observation – Shigeto Nishino (JAMSTEC)

The presentation reported on the Second International Workshop on Arctic Ocean Observation that was held on October 27, 2025, in Yokohama, Japan. The workshop aimed to share updates on recent and planned Arctic Ocean observation efforts and to develop concrete future observation plans, particularly involving the RV *Mirai II*, through international collaboration and expert input. A total of 81 participants from 9 countries attended. The event fostered active discussion, strengthened global cooperation, and contributed to advancing coordinated Arctic research initiatives.

#### 5. Updates on interaction with other organizations/projects



##### Update on CoObs RNA and SAON – Hajo Eicken (UAF)

The presentation describes the ROADS (Roadmap for Arctic Observing and Data Systems) initiative led by Sustaining Arctic Observing Networks (SAON), a joint effort of the Arctic Council and the International Arctic Science Committee. ROADS aims to improve Arctic observing and data systems by building partnerships and developing clear, coordinated plans that deliver societal benefits. It is supported by SAON's Committee on Observations & Networks and the Arctic Data Committee. A central principle is ensuring equitable participation of Indigenous Peoples, including funding to support their active involvement. The initiative also emphasizes shared benefits, alignment with existing networks, and avoiding duplication of efforts.



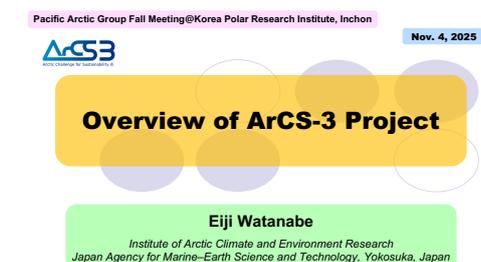
##### An overview of Arctic Ocean 2050 – Jørgen Berge (UiT)

The presentation outlines the Arctic Ocean 2050 research initiative, which focuses on supporting sustainable management of a rapidly changing Arctic Ocean. Over the next 30 years, rising temperatures are expected to transform the Arctic from ice-covered to increasingly ice-free and accessible in summer, with potentially severe and uncertain global consequences. The program emphasizes that both the causes and impacts of these changes are global, requiring international awareness and preparedness. Led by Norway, the initiative highlights the use of national expertise and new technologies, with a particular focus on its sector of the Arctic Ocean. Launching on January 1, 2026, the program is funded with 2 billion NOK over ten years. Although Norwegian-led, it is designed to involve and support collaboration with other Arctic-interested nations.



### An overview of FACE (Following Arctic/Antarctic iCE) program - Xi Zhao (Sun Yat-sen University)

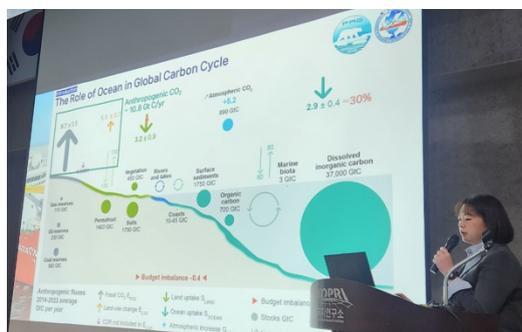
The FACE (Following Arctic iCE) program is a 10-year international initiative (2023–2032) focused on understanding rapid Arctic change by tracking declining sea ice. Led by Sun Yat-sen University with global partners, it integrates observations, remote sensing, and modeling to study interactions among sea ice, ocean, atmosphere, and ecosystems. Research topics include ice melt processes, ocean heat and carbon fluxes, atmospheric dynamics, and pollutants. The program includes a preparatory phase (2024–2025) and an operational phase (2026–2032), using a dedicated research vessel. It also promotes international collaboration, outreach, and education while contributing to broader polar research efforts.



### An overview of ArCS-3 – Eiji Watanabe (JAMSTEC)

The presentation introduces ArCS-3 (Arctic Challenge for Sustainability Phase 3), a Japanese research project running from 2024 to 2030 aimed at addressing environmental and societal challenges in the Arctic. ArCS-3 focuses on interdisciplinary observations and advanced simulations. The project is organized into four research areas: aerosols, greenhouse gases, climate disasters, and biodiversity. A key focus is understanding carbon cycles and environmental interactions across atmosphere, land, and ocean systems. The results are expected to support decision-making in sectors like fisheries, shipping, and public health.

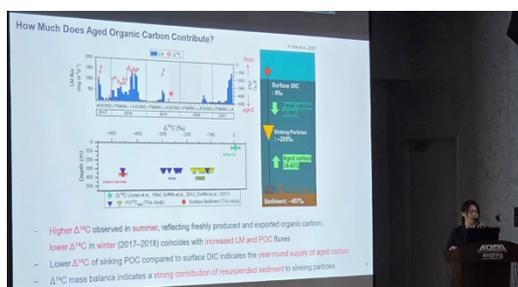
## 6. Early Career Scientists



### Impact of Ocean Acidification on pteropod shell density - Ahra Mo (KOPRI)

Overall, the findings highlight the importance of considering both biological and environmental factors when evaluating the impacts of ocean acidification.

The presentation examines the impact of ocean acidification on the shell density of the calcifying pteropod *Limacina helicina*. The study combines morphological measurements and inorganic carbon data to assess how environmental conditions affect shell formation. Results show that shell density is influenced by both ocean chemistry and life stage.



### Long-term sediment trap observation in the Pacific Arctic: Insights from multitracers - Hojung Kim (KNU)

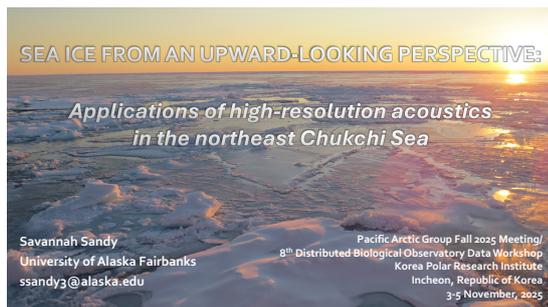
The presentation explores long-term sediment trap observations in the Pacific Arctic, using a multi-tracer approach to understand the sources and transport of sinking particles and organic carbon. Results show that both fresh organic carbon and a significant proportion of aged carbon—mainly from resuspended sediments and lateral transport—contribute to sinking particles year-round. Radiocarbon data indicate seasonal shifts in carbon sources, while neodymium isotopes trace sediment origins and transport pathways influenced by ocean currents and sea ice. Together, these tracers highlight the complex interactions between biological activity, physical transport, and environmental change in the Arctic.



## “Seeds” on the Seafloor of the Pacific Arctic: What is the Role of Diatoms in Sediments? - Yuri Fukai (JAMSTEC)

The presentation explores shifting phytoplankton blooms in the Arctic, highlighting increasingly common autumn blooms driven by delayed sea-ice formation and storms. Strong winds resuspend sediments, supplying both nutrients and diatom resting spores that seed blooms. Incubation experiments show that sediment input boosts initial biomass

and accelerates bloom development, mainly through large diatoms like *Chaetoceros*. This benthic-pelagic interaction helps sustain autumn productivity, offering ecological benefits during a season normally limited by light and ice.



## Sea ice from an upward-looking perspective: Applications of high-resolution acoustics in the NE Chukchi Sea - Savannah Sandy (UAF)

The presentation highlights the relationship between sea ice, physical environment, and marine ecosystems using high-resolution acoustic data. Data from the Chukchi Ecosystem Observatory (CEO), including upward-looking sonar, provide detailed, year-round measurements of ice

thickness, open water, and environmental parameters. Analyses show that ice conditions vary between warm and cold years, affecting salinity, open-water duration, and ecosystem dynamics. Acoustic monitoring of marine mammals reveals clear patterns: bearded seals are associated with ice presence, while walrus vocalizations are more common when ice is absent. Overall, the work links physical changes in sea ice to ecological responses in Arctic marine species.



## Microbial Communities from the Shelf to the Pole: Results from the US SAS - Christina Goethel (UMCES)

The presentation reports on microbial communities across Arctic waters from the continental shelf to the North Pole. On the shelf, communities are similar between stations and dominated by Gammaproteobacteria. Along the slope, microbial communities remain consistent, with Betaproteobacteria appearing at deeper depths while

Gammaproteobacteria remain abundant. In the basin near the North Pole, core samples show similar communities dominated by Alphaproteobacteria and Gammaproteobacteria. Overall, microbial composition shifts predictably with depth and distance from the shelf.

## 7. Update/other discussions

### *Updates on PAG Structure, Chair Rotation, and PAG Meetings*

- The PAG Chair position will transition to Japan, with Motoyo Itoh (JAMSTEC) serving from late 2026 through 2028.
- The 2026 Spring meeting is scheduled for March 27 during the Arctic Science Summit Week in Aarhus, Denmark.
- The 2026 Fall meeting will be held in Victoria, Canada, in October or November.
- The 2027 Spring meeting will be held during the Arctic Science Summit Week in Hakodate, Japan.

# Pacific Arctic Group (PAG) 2025 Fall Meeting



<https://pag.arcticportal.org/>

**PAG 2025 Fall Meeting Agenda**  
**November 3, 2025: 9:00-17:00 (KST)**  
**November 4, 2025: 9:00-12:00 (KST)**

**Venue: Sejong Seminar Room, 2<sup>nd</sup> floor, Cafeteria building**  
**Korea Polar Research Institute**  
**26 Songdomirae-ro, Yeonsu-gu, Incheon, Republic of Korea, 21990**

**Local hosts:** Eun Jin Yang ([eiyang@kopri.re.kr](mailto:eiyang@kopri.re.kr)); +82 10-3125-0144  
Catherine Lalande ([catherine.lalande@kopri.re.kr](mailto:catherine.lalande@kopri.re.kr)); +82 10-2254-0930  
Chaelin Yeon ([chyeon@kopri.re.kr](mailto:chyeon@kopri.re.kr)); +82 10-3007-4825

## **Virtual Zoom meeting:**

<https://us06web.zoom.us/j/82435490298?pwd=CKrWpBrEmDobTbs43BNjTHNGW8cC49.1>

Meeting ID: 824 3549 0298

Password: 046969

The **PAG 2025 Fall Meeting** is hosted by the Korea Polar Research Institute. We will report on the 2025 field sampling and preliminary results, prior PAG activities, as well as discuss plans for the 2026 field activities and beyond. The meeting will provide highlights of science results from PAG endorsed projects (DBO, PACEO, CAO), joint research activities, interaction with other organizations/projects, PAG organizational issues, and other business topics.

## Agenda

Monday November 3, 2025 (9:00-17:00 KST)

[9:00-9:30] **1. Welcome and Overview**

Agenda review and Introduction of participants – Eun Jin Yang (KOPRI)

[9:30-10:30] **2. Country reports: Field activities, prior results, and plans for 2026 (max 15 min each)**

- Canada = Bill Williams (DFO-MPO)
- China = Jianfeng He (Polar Research Institute of China)
- Japan = Motoyo Itoh (JAMSTEC)
- Korea = Eun Jin Yang (KOPRI)
- USA = Jackie Grebmeier (UMCES)

[10:30-11:00] **Group photo and coffee break**

[11:00-12:00] **3. PAG-related joint research activities: reports, summaries, results, plans (max 15 min each)**

*3a. Distributed Biological Observatory (DBO)*

- Pacific DBO activities 2025 and 2026 plans – Jackie Grebmeier (UMCES)
- KOPRI's Contribution to DBO: Current Status and Future Plans – Jinyoung Jung (KOPRI)
- Atlantic DBO activities Pan-Arctic DBO – Monika Kedra (IOPAN) & Christina Goethel (UMCES)
- Baffin Bay/Davis Strait DBO – Craig Lee (University of Washington; online)

[12:00-13:30] **Lunch (hosted by KOPRI)**

[13:30-15:00] **PAG-related joint research activities (continued):**

*3b. Pacific Arctic Climate Ecosystem Observatory (PACEO)*

- Update from KOPRI physical oceanography activities – Kyoung-Ho Cho (KOPRI)
- Update from KOPRI biological oceanography activities – Jee-Hoon Kim (KOPRI)
- Arctic Ocean trace metal activities – Taejin Kim (Pukyong National University)
- Mechanisms and consequences of pulsed autumn phytoplankton blooms in the Pacific Arctic seas with sea ice decline – Zhixuan Feng (East China Normal University)

*3c. Central Arctic Ocean (CAO)*

- Brief updates on the Working Group on Integrated Ecosystem Assessment for the Central Arctic Ocean (WGICA) and CAOFA Joint Program of Scientific Research and Monitoring (JPSRM) – Shigeto Nishino (JAMSTEC)
- CAOFA 4<sup>th</sup> COP Update – Jihoon Jeong (KOPRI)

[15:30-16:00] **Coffee break**

[16:00-17:00] **PAG-related joint research activities (continued):**

*3d. Synoptic Arctic Survey (SAS)*

- Brief updates on recent SAS activities and results – Shigeto Nishino (JAMSTEC)
- US SAS activities and plans - Jackie Grebmeier (UMCES) and Carin Ashjian (WHOI)

**4. Updates on proposed international research activities (max 15 min each)**

- Cross cutting proposal for SAS ECR activities – Christina Goethel (UMCES)
- 2<sup>nd</sup> International Workshop on Arctic Ocean Observation – Takashi Kikuchi (JAMSTEC; online)

[17:00] **End Day 1**

[17:00-17:30] **Executive committee meeting**

[17:30] **Reception at KOPRI cafeteria (hosted by KOPRI)**

**Tuesday November 4, 2025 (09:00-12:00 KST)**

**[09:00 -10:00] Agenda review**

**5. Updates on interaction with other organizations/projects (max 15 min each)**

- Update on CoObs RNA and SAON – Hajo Eicken (University of Alaska Fairbanks; online)
- An overview of Arctic Ocean 2050 – Jørgen Berge (University of Tromsø; online)
- An overview of FACE (Following Arctic/Antarctic iCE) program - Xi Zhao (Sun Yat-sen University; online)
- An overview of ArCS-3 – Eiji Watanabe (JAMSTEC; online)

**[10:00 -10:30] Coffee Break**

**[10:30 -11:45] 6. Early Career Scientists (max 15 min each)**

- Impact of Ocean Acidification on pteropod shell density - Ahra Mo (KOPRI)
- Long-term sediment trap observation in the Pacific Arctic: Insights from multi-tracers - Hojung Kim (Kyungpook National University)
- “Seeds” on the Seafloor of the Pacific Arctic: What is the Role of Diatoms in Sediments? - Yuri Fukai (JAMSTEC)
- Sea ice from an upward-looking perspective: Applications of high-resolution acoustics in the NE Chukchi Sea - Savannah Sandy (UAF)
- Microbial Communities from the Shelf to the Pole: Results from the US SAS - Christina Goethel (UMCES)

**[11:45 -12:00] 7. Update/other discussions**

- Executive committee member: PAG Chair rotation in fall 2026 to Japan
- Future PAG meetings
  - 2026 Spring meeting (26 ASSW, Denmark)
  - 2026 Fall meeting: Canada
  - 2027 Spring meeting (27 ASSW, Japan)
- Other discussions or information

**[12:00] End of PAG meeting**

**[12:00-13:30] Lunch (hosted by KOPRI)**

## ANNEX

### a. Chair and Secretariat rotates every 2 years at the end of the Fall Meeting:

- 2012-2014 – USA (Jackie Grebmeier, UMCES)
- 2014-2016 – Korea (Sung-Ho Kang, KOPRI)
- 2016-2018 – Japan (Takashi Kikuchi, JAMSTEC)
- 2018-2020 - China (Jianfang He, PRIC)
- 2020-2022 – Canada (Bill Williams, DFO-MPO)
- 2022-2024 – USA
  - 2022-2023 (Jessica Cross, NOAA)
  - 2023-2024 (Jackie Grebmeier and Christina Goethel, UMCES)
- 2024-2026 – Korea (Eun Jin Yang, KOPRI)
- 2026-2028 – Japan

### b. Executive committee composed of:

- PAG Chair: Eun Jin Yang (Korea)
- Vice-Chairs (one representative from each PAG member nation):
  - Bill Williams (Canada)
  - Jianfeng He (China)
  - Shigeto Nishino (Japan)
  - Jackie Grebmeier (USA)

### c. Past and Future PAG meetings

#### Fall meetings:

2010: Tokyo, Japan  
2011: Victoria, Canada  
2012: Suzhou, China  
2013: Incheon, Korea  
2014: Seattle, USA,  
2015: Korea, Incheon  
2016: Qingdao, China  
2017: USA, Seattle, USA  
2018: Japan, Hakodate, Japan  
2019: Hangzhou, China  
2020: Online  
2021: Online  
2022: Victoria, Canada (hybrid)  
2023: Tokyo, Japan (hybrid)  
2024: Baltimore, USA (hybrid)  
2025: Incheon, Korea (hybrid)  
2026: Victoria, Canada

#### Spring meetings at ASSW:

2012: Montreal, Canada (IPY)  
2013: Krakow, Poland  
2014: Helsinki, Finland  
2015: Toyama, Japan  
2016: Fairbanks, Alaska  
2017: Prague, Czech Republic  
2018: Davos, Switzerland  
2019: Arkhangelsk, Russia  
2020: Akureyri, Iceland (online)  
2021: Lisbon, Portugal (online)  
2022: Tromsø, Norway (hybrid)  
2023: Vienna, Austria (hybrid)  
2024: Edinburgh, UK (hybrid)  
2025: Boulder, USA (hybrid)  
2026: Aarhus, Denmark  
2027: Hakodate, Japan

### Meeting venue map



The cafeteria building is accessible from outside (shuttle drop-off near parking entrance)

#### KOPRI parking entrance



#### Cafeteria building



#### Sejong seminar room – 2<sup>nd</sup> floor

