

Change of people's consciousness for sea ice through the Symposium at Mombetsu as a lecture in the service education course by UArctic at Nuuk, Greenland

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I will make the following lecture in the service education course by UArctic (the University of the Arctic) in October 22-24, 2019, at Nuuk in Greenland (Fig. 1). After finishing the course, I can report more information about UArctic activities.

[Southern limit of sea ice]

Sea ice arrives at the coast of the Sea of Okhotsk in Hokkaido every year (Fig. 2). This area is located at 44 degrees north in latitude. This is the southern limit for sea ice in the northern hemisphere. No sea ice exists at this low latitude in the southern hemisphere, and therefore, the sea ice seen here are those that are located at the lowest latitude throughout the world.

[Symposium on Okhotsk Sea & Polar Oceans]

At Mombetsu City, the International Symposium on Okhotsk Sea & Polar Oceans is held every year since 1986 (Fig. 3). The theme is about Sea of Okhotsk, sea ice, and the Arctic and Antarctic Oceans. It is rare case that a local city would hold an international convention every year. The next 35th Symposium will be held in Feb. 2020.

[Change of people's consciousness]

Sea-ice was recognized as a 'white devil' thirty years ago because the sea-ice led to marine accidents and fishing interruption. However, people could understand by the researches of Symposium that sea ice makes the Sea of Okhotsk rich, because "ice algae" breed rapidly on the bottom of ice as 'blooms' and zooplanktons and fishes increase. Adding to it, lots of sightseeing tourists come to see sea ice. Thus, people has been understood the sea-ice is important for the fisheries and sightseeing in this area.

[Scallop aquaculture]

On the basis of Symposium research, scallop aquaculture developed along Okhotsk coast. The sea area in Mombetsu is divided into 5 fishing zones. 1 zone is for producing young shellfish. Other 4 zones are for 4-year cycle aquaculture. Young shellfish are released at the zones one by one, and they are harvested after 4 years.

[Sea ice sightseeing]

The Okhotsk Sea Ice Museum is unique facility of sea ice, where you can look at and touch sea ice throughout the year (Fig. 4). Okhotsk Tower stands near a pier for sightseeing and marine research routine (Fig. 5). Its origin is an experiment tower for the former offshore oil-development project in Sakhalin. The sightseeing icebreaker Garinko II equips Archimedes' screws and normal screws (Fig. 6). Its origin is a vehicle on sea ice also for the former oil project.



Fig. 2 Sea ice at Mombetsu



Fig.3 International Symposium on Okhotsk Sea & Polar Oceans



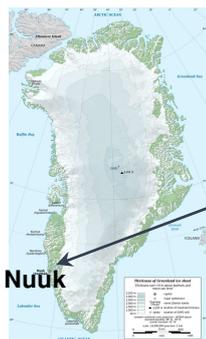
Fig. 4 Okhotsk Sea Ice Museum of Hokkaido



Fig. 5 Okhotsk Tower



Fig. 6 Sightseeing icebreaker Garinko II with Archimedes' screws



Nuuk



Fig. 1 Nuuk (Godthåb until 1979): capital of Greenland. Population is about 19,000. (from Wikipedia)