

Title

Dr.

Last Name of PRESENTING Author

Beszczyńska-Moeller

Middle Name or initials of PRESENTING Author**First Name of PRESENTING Author**

Agnieszka

Email of PRESENTING Author

abesz@iopan.gda.pl

Country of PRESENTING Author

Poland

Institution, organization or general address

Institute of Oceanology PAS

Theme

Sub-Theme 2: Implementing and Optimizing a pan-Arctic Observing System

Author list (in order)

Beszczyńska-Moeller*, Agnieszka; Sandven, Stein; Sagen, Hanne; Voss, Peter; Ahlstrom, Andreas; Johannessen, Truls; Soltwedel, Thomas; and Goeckede, Mathias

Poster title (brief)

Enhancement of in situ observing systems in the Arctic under INTAROS

Abstract - text box

The Integrated Arctic Observation System (INTAROS) is a research and innovation action under Horizon2020. INTAROS aspires to increase the temporal and geographic coverage of in situ observations and add new key geophysical and biogeochemical variables in selected regions of the Arctic. By using a combination of mature and new instruments and sensors in integration with existing observatories, INTAROS aims to fill selected gaps in the present-day system and build additional capacity of pan-Arctic monitoring networks.

Three reference sites have been selected as key locations for monitoring ongoing Arctic changes: Coastal Greenland, paramount for freshwater output from the Greenland ice sheet; North of Svalbard (shelf to deep basin) - the hot-spot for ocean-air-sea ice interactions, and heat and biological energy input to the European Arctic; and Fram Strait - the critical gateway for exchanges between the Arctic and the World oceans. Two distributed observatories: for ocean and sea ice and for terrestrial and atmospheric measurements will be extended with multidisciplinary

observations, still missing from the central Arctic and remote coastal areas. New sensors, integrated platforms and experimental set-ups will be implemented during a two-year long deployment phase (2018-2020) with an aim for sustained use in a future integrated Arctic Observing System. New observations will be used for integration of new data products, demonstration studies and stakeholder consultations, and contribute to ongoing and future long-term initiatives (e.g. OSPAR, SAON, YOPP).