

Title**Last Name of PRESENTING Author**

Biebow

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

Nicole

Email of PRESENTING Author

nicole.biebow@awi.de

Country of PRESENTING Author

Germany

Institution, organization or general address

Alfred Wegener Institute, Helmholtz Center for Polar and Marine Research

Theme

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

Author list (in order)

Biebow, Nicole* and Veronica Willmott

Poster title (brief)

ARICE - Making the Arctic Ocean accessible for excellent science

Abstract - text box

Retreating sea ice and warming waters create opportunities and challenges that have given rise to an unprecedented political and economic interest in the Arctic Ocean over the past decade. Increased European funding of polar research demonstrate how critical science-informed decision-making has become in the face of a changing Arctic. These investments have enabled scientists to contribute substantially to understanding the ongoing processes. However, compared to the knowledge base needed for effectively predicting the effects of climate change, the available datasets are still insufficient.

The new EU infrastructure project ARICE joins the efforts of 14 partners from 12 different countries to provide the Arctic research community with better capacities for marine-based observations in the Arctic Ocean.

ARICE will develop strategies to ensure the optimal use of the existing polar research vessels and will work towards an International Arctic Research Icebreaker Consortium which shares and jointly funds operational ship time on the available Research Icebreakers.

ARICE will also provide fully-funded transnational access to six key European and International Research Icebreakers for European and International researchers, solely based on the scientific excellence of the

submitted proposals. ARICE will amongst other expeditions, give scientists access to the German research icebreaker Polarstern during the MOSAiC expedition. MOSAiC stands for Multidisciplinary drifting Observatory for the Study of Arctic Climate and is the first year-round expedition into the central Arctic exploring the Arctic climate system. ARICE is also partnering with the maritime industry on a “ships and platforms of opportunity” programme and will improve the research icebreakers’ services by exploring into new key technologies which could lead to an improvement of ship-based and autonomous observations in the Arctic Ocean.