

Research Unit 5

# Research infrastructure

## Performance categories LK I and LK II

The Alfred Wegener Institute maintains a number of research platforms for marine, terrestrial and atmospheric research in the Arctic, Antarctic and North Sea. They include the icebreaking RV Polarstern, the medium range RV Heincke, and the Neumayer Station III in Antarctica (LK II category). RV Polarstern is a powerful polar research and supply vessel operating since 1982 in Arctic and Antarctic for 310 days per year. It will be replaced by a new icebreaker in 2021/22.

RV Heincke is a low-noise vessel for work in ice-free waters of the Northern Seas and often used for training. The Neumayer Station III in Dronning Maud Land is the German base for the year-round operated observatories including the infra-sound array IS 27 operated by BGR as German contribution to CTBTO and for Antarctic field work including the summer station Kohlen on the inland plateau. AWI also maintains internationally relevant infrastructure in the LK I category, including polar and coastal stations (AWIPEV, Samoylov, Dallmann Laboratory, Helgoland, Sylt stations), aircraft (Polar 5 & 6), small-size ships (Uthörn, Mya II, Aade), ice and sediment core facilities, geophysical equipment, underwater platforms, modular land, ice and ocean observatories, long-term ecological time series in North Sea and Fram Strait.

AWI invests in state of the art molecular laboratories, experimental facilities and in high-performance supercomputing. It contributes actively to the development of Earth System Models and maintains with MARUM the World Data Centre PANGAEA for Earth and Environmental Science.

Speaker: Uwe Nixdorf



Research Unit 1a

The Polar Atmosphere and Cryosphere in a Changing Climate



Research Unit 1b

Global change effects on polar ecosystems and biogeochemistry



Research Unit 2

Fragile coasts and shelf seas





**The Earth System  
from a polar perspective:  
Data, modelling and synthesis**



**Bridging research and society:  
Products, tools  
and climate services**

