

From Akvaplan-niva to VISTA scholars

Tremendous innovation is underway in the marine technology sector that is ushering in a new era of ocean exploration and scientific discovery. At Akvaplan-niva, we develop environmental simulation technologies to visualize and interpret complex ocean processes in new ways and we partner with technology providers to capture the potential of surveillance technology and big data algorithms to collect and analyze more data more efficiently and far more quickly than traditional methods. Many of our projects include supervision of Ph.D. and Master's level students and the training of early career scientists.

Three early career scientists, trained by Akvaplan-niva specialists, are distinguishing themselves on a career path in the ocean sciences focused on technology applications. They are recent winners of the prestigious [VISTA](#) scholarship program operated through a collaborative partnership between Equinor and the Norwegian Academy of Science and Letters. The aim of VISTA is to stimulate basic mathematical and scientific research related to the utilization and management of Norway's petroleum resources.

WHO THEY ARE:

1. Ana Sofia Aniceto

Dr. Aniceto was just awarded a 3 year VISTA post-doctoral position. Dr. Aniceto previously trained at Akvaplan-niva working on the use of unmanned aerial vehicles for marine mammal studies within The Research Centre for Arctic Petroleum Exploration ([ARCEX](#)), a Research Council of Norway project together with 10 academic and 8 industry partners. Dr. Aniceto was part of the ARCEX workpackage, Arctic Risk Management, led by Akvaplan-niva. She received her Ph.D. in June 2018 from UiT-The Arctic University of Norway, Department of Geosciences with Adjunct Professor JoLynn Carroll (Akvaplan-niva) as her main supervisor.

Dr. Aniceto's VISTA project will analyze hydrophone data collected with marine autonomous vehicles and a subsea observatory to study the ecology of sea mammals in Northern Norway. Her work contributes to knowledge-based management of natural resources using new surveillance technology for the acquisition of multidisciplinary data. She is part of Akvaplan-niva's Glider project, led by Dr. Lionel Camus, in collaboration with 5 technology companies. Glider is supported by the Norwegian Research Council Demo-2000 program and ConocoPhillips. Dr. Aniceto will be based at UiT-The Arctic University of Norway, Department of Arctic and Marine Biology with Dr. Raul Primicerio as her main mentor.

2. Emmelie Åström

In 2018, Dr. Åström was awarded a 3 year VISTA post-doctoral position. Dr. Åström previously trained with Akvaplan-niva, lead of the Seabed Ecosystem workpackage (2013-2017) at the Norwegian Center of Excellence for Arctic Gas Hydrate, Environment and Climate ([CAGE](#)). She conducted groundbreaking research on the biology and ecology of high Arctic cold-seep communities offshore of Svalbard. She received her Ph.D. from UiT-The Arctic University of

Norway, Department of Geosciences with Adjunct Professor JoLynn Carroll (Akvaplan-niva) as main supervisor.

Dr. Åström's [VISTA](#) project examines the role and impact of chemosynthetic carbon sources for marine food webs at Arctic cold seeps. She will be using innovative underwater technologies and advanced analyses to study and document these specialized seafloor communities. Dr. Åström is an associated member of the [Nansen Legacy](#) project. Carried out by ten research institutes, including Akvaplan-niva, the aim of Nansen Legacy is to provide integrated scientific knowledge on the rapidly changing marine climate and ecosystem. Dr. Åström is based at UiT-The Arctic University of Norway, Department of Arctic and Marine Biology with Professor Bodil Bluhm as her main mentor.

1. Eli Børve

In 2017, Ms. Børve was awarded a 3 year VISTA Ph.D. position. Prior to this achievement, Ms. Børve was a member of the [Oceanography group](#) at Akvaplan-niva's Research Department working with physical oceanographer Dr. Ole Anders Nøst. Nøst is a supervisor of her VISTA project.

Ms. Børve's [VISTA](#) project focuses on the use of unconventional technologies for the simulation of complex oceanographic processes. In her project, she uses an unstructured-grid model to simulate transport and dispersion in the Lofoten-Vesterålen region of Northern Norway. The use of models with variable spatial resolution of numerical grids is innovative and important because it allows modelers to better resolve ocean processes, especially in highly complex areas such as coastlines and restricted water passages. Ms. Børve's model simulations are being used to explore how ocean complexity influences the life cycle of marine species and how high resolution ocean modelling helps resolve such complexity. She is based at University of Oslo, Department of Geosciences with Professor Pål Erik Isachsen as her main supervisor.

Akvaplan-niva congratulates these three outstanding early career scientists for their hard work, dedication, and bright futures of scientific discovery supported by innovative technologies.

Akvaplan-niva conducts research on sustainable aquaculture, arctic ecosystems, the environmental impacts of human activities, and the application of emerging technologies for environmental sampling and detection. Our research and innovation programs are financed through competitive grants from government research agencies, public non-profit entities and from private companies.