

Science and Research



Inspection, intervention and monitoring | Seabed surveys | Resident ROV/AUV | Engineering | Tau Autonomy Center | Smart Ocean Tooling

ROV (Remotely Operated Vehicle) and AUV (Autonomous Underwater Vehicle) services play a crucial role in science and research, particularly in the field of marine exploration and research. Here are some of the key services provided by ROVs and AUVs for science and research:

**1. Exploration and Mapping:** ROVs and AUVs are used to explore and map underwater environments, including the ocean floor, deep-sea trenches, and underwater caves. They can collect data, images, and videos to create detailed maps of underwater terrain.

**2. Data Collection:** ROVs and AUVs are equipped with various sensors and instruments to collect a wide range of data, including water temperature, salinity, pressure, and marine life observations. This data is crucial for scientific research and environmental monitoring.

**3. Sample Collection:** ROVs and AUVs can collect samples of water, sediment, and marine organisms for scientific analysis. These samples provide valuable insights into marine ecosystems, biodiversity, and environmental health.

**4. Underwater Research:** ROVs and AUVs are used to research marine habitats, underwater geology, marine archaeology, and deep-sea ecosystems. They enable researchers to study remote and inaccessible underwater areas.

**5. Monitoring and Surveillance:** ROVs and AUVs are used for long-term monitoring and surveillance of marine environments, including tracking marine animals, monitoring underwater infrastructure, and detecting environmental changes.

**6. Underwater Maintenance:** ROVs are often used for underwater maintenance tasks, such as inspecting underwater structures, pipelines, and equipment. They can also perform tasks like underwater welding, cleaning, and repairs.

**7. Search and Rescue:** AUVs equipped with sonar and imaging systems can be used for search and rescue operations in maritime emergencies. They can search large areas efficiently and locate missing persons or objects underwater.

ROV and AUV services are essential tools for scientific research in marine environments, providing valuable data, insights, and capabilities for exploring and understanding the underwater world.



Science and Research



## Inspection, intervention and monitoring | Seabed surveys | Resident ROV/AUV | Engineering | Tau Autonomy Center | Smart Ocean Tooling

## Ongoing project: High Arctic Ocean Observation System

Stinger Technology AS is a part of the consortium HiAOOS: High Arctic Ocean Observation System. This is a project aiming to develop, implement and validate several ocean observation technologies to improve the data gathering under the Arctic ice.

The goal is to update the observational ability and capacity in the Arctic to strengthen European and national infrastructure in an attempt to support new and ambitious research within the climate, environment, and geohazards.

Stinger contributes to the vanguard with gliders underneath the ice and the placement of sensitive acoustic- and GPS systems in the 4000m deep Amundsen and Nansen basins as well as the testing of advanced autonomous systems.



Stinger Technology AS | Dusavikveien 39 | 4007 STAVANGER Phone: (+47) 915 71 819 | E-mail: post@stinger.no | Web.: www.stinger.no