



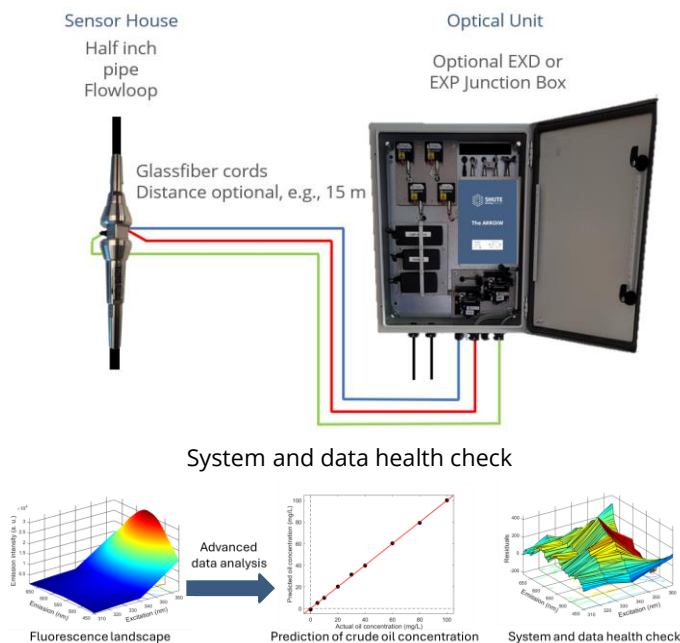
SHUTE Sensing Solutions A/S has together with academic and commercial partners (see below) developed a new and revolutionary sensor system for monitoring oil droplets in produced water.

New Advanced OiW Monitoring and Control Technology

A new fluorescence-based sensing technology has been under development the last three years which is connected directly to advanced control algorithm developments for control of produced water treatment process units in the O&G industry. We call it **The ARROiW** (Advanced Recording for Reduction of Oil in Water) sensor system.



Based on a thorough gap analysis of existing practices around discharge monitoring and hydrocyclone control, the end-goal has been to develop the ultimate monitoring/control solution to reduce the environmental impact of produced water discharges. The prototype is ready for testing, and we are searching for appropriate partners to fulfill this task on the way to commercialization.



How it works:

Produced water passes through the sensor head, which is an on-line type of flow cell connected to two specialized spectrometers via fiber optics. This allows the spectrometers to real-time register the fluorescence 3D data.

Fluorescence is highly sensitive to even minute changes in environment and have many non-linear effects, that currently may lead to erroneous read out and false control input. With this new approach we iron out these potential errors to push the limit of optimizing OiW separation technologies, hence delivering cleaner water.

The ARROiW sensor head is installed in a sidestream configuration, and the optical unit box can be delivered in an ATEX approved cabinet, if required. The equipment is easy to install and due to the design fouling issues are minimal. Due to the advanced monitoring technology, the system is also applicable in wastewater industries, e.g., industrial and municipal sewage treatment plants.

Innovation Project: Oil in Water	In cooperation with:
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For more information visit www.shute.dk or feel free to call us on +45 2338 6728 to discuss how SHUTE technology can assist you in optimizing your sensing needs.