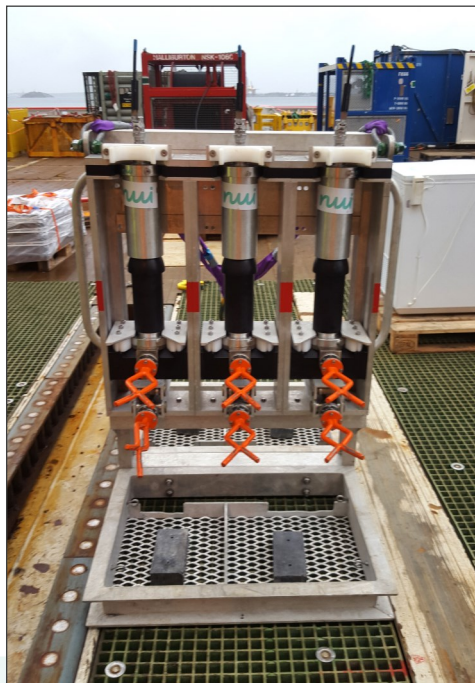


SEDIMENT SAMPLING

NUI has developed a new tool for ROV operated **gas-tight** seabed sediment sampling. The sampler fulfills the **NORSOK U-100** requirement that states “*if the sediment analysis is performed at the surface, a sampling technique that allows the gas-tight seabed sampling to be brought to surface maintaining the content of possible contaminants, shall be applied*”.

NUI sediment sampler consists of an inner and an outer container. Three samplers are installed in a sampler frame before being lowered to the seabed. Sediment sample is collected with the inner container, which is then inserted into the outer container and dynamically sealed.

Any pressure built up is equalized by sampler volume expansion. At surface the samplers are removed from the frame and stored in a freezer (-20°C) until transport to laboratory.



NUI has established a procedure for processing the sediment samples at the laboratory. While still inside the sampler, volatile organic compounds (VOCs) in the sediment sample are off-gassed into a helium gas phase, and further transferred onto adsorbent tubes.

Analysis of VOCs in adsorbent tubes is performed by thermal desorption and gas chromatography – mass spectrometry (ATD-GC-MS).

In addition, the sediment sample can be analysed for other components such as **metals** and **non volatile hydrocarbons**. Other sampler applications are in connection with ship wreck, polluted harbors, industrial areas and sediments near fish farms.

Our lab is easily accessible in Gravdal, Bergen.

For **further information** or questions, please contact:

Leader Test and Analysis:

Kim Løseth

T: +47 934 12 460

M: kil@nui.no

