Examples of scientific papers in which AADI Aanderaa optodes have been used and evaluated

Commercially available oxygen optodes for oceanographic application were introduced by AADI in 2002. The long-term stability (years) and reliability of these sensors have revolutionized oxygen measurements and several thousand are in use in applications ranging from streams to the deep sea, from fish farms to waste water, from polar ice to hydrothermal vents. This document gives examples of published scientific investigations in which AADI optodes have played a central role.

The basic technique of the AADI oxygen optode and an evaluation of its functioning in aquatic environments were presented in Tengberg et al (2006). Other studies include use on autonomous Argo floats Joos et al (2003), Körtzinger et al (2004 and 2005) and gliders (Nicholoson et al., 2008), long-term monitoring in coastal environments with high biofouling (Martini et al., 2007), on coastal buoys (Jannasch et al., 2008), on Ferry box systems (Hydes et al., 2009), on cabled CTD instruments for profiling down to 6000 m including suggestions for improved calibrations, pressure effect and compensation for slow response (Uchida et al., 2008) and in chemical sensor networks (Johnson et al., 2007). Drazen et al. (2005) presented a novel technique to measure respiration rates of deep sea fish and Sommer et al (2008) described an automatic system to regulate oxygen levels and to measure sediment-water fluxes during in-situ sediment incubation at vent sites. Also Pakhomova et al (2007) and Almroth et al. (2009) used the same type of optodes during sediment-water incubation studies with autonomous landers.

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