

Underway pCO₂ Analyser for Marine Institute



The Marine Institute in Galway, Ireland, recently took delivery of a General Oceanics 8050 underway pCO₂ system. It will be used to investigate carbon dioxide (CO₂) dissolved in the surface layers of the ocean in order to better understand changes in ocean carbon chemistry and ocean acidification due to enhanced atmospheric CO₂. The instrument will form part of the institute's contribution to the GO-Ship A02 survey, which is being undertaken on board the MI Research Vessel '*Celtic Explorer*' this year.

The system was supplied by Swale Technologies Ltd of Bordon, UK and manufactured by General Oceanics, USA, who expedited delivery to fit with the busy schedule of the *Celtic Explorer*. Installation, commissioning and training was all completed within just a few

weeks, delivery having been made just prior to Christmas.

The GO8050 pCO₂ system is based on a design by Craig Neill of the University of Bergen and over 70 systems have been commissioned around the world. It incorporates a LI-COR non-dispersive infrared (NDIR) analyser to measure the carbon dioxide partial pressure but other instruments such as a thermosalinograph, fluorometer or pH sensor can also be integrated. Particularly useful for an autonomous underway system is its ability to monitor the GPS position and shut itself down when entering port to avoid damage from contaminated water.

<https://www.hydro-international.com/content/news/underway-pco2-analyser-for-marine-institute>
