

# Winch and CTD Packages for Turkish Research Vessels



MacArtney Underwater Technology and Sea-Bird Scientific have joined forces to deliver four complete oceanographic instrumentation solutions to research vessel operators in Turkey. A common denominator for the type of oceanographic package procured by these Turkish research clients is the combination of MacArtney CORMAC Q winches and Sea-Bird Scientific CTDs and water-sampling systems.

In addition to this, clients have opted to mix-and-match different instrumentation options including the range of optical and water quality sensors from WET Labs and Satlantic offered by Sea-Bird - to form turnkey CTD packages corresponding with their specific

scientific measurement needs. In extension of this, all installation, commissioning and training, performed by MacArtney specialists, was also included in the packages.

## The vessels

The first of four Turkish research vessels to take delivery of the MacArtney and Sea-Bird CTD solution was the R/V *TUBITAK Marmara* built by CEKSAN shipyard for the Scientific and Technological Research Council of Turkey. The second and third Turkish research vessels to benefit from a turnkey MacArtney and Sea-Bird package was the R/V *Seydi Ali Reis* - a new scientific vessel operated by the Sinop University and the *ARAMA 1* - a newly built vessel operated by the Mediterranean Sea and Fishery Institute based in Antalya. Finally, a fourth system procured by an undisclosed Turkish client, for installation on a new research vessel, has been delivered, with commissioning planned to take place during 2015.

*Image: A MacArtney and Sea-Bird CTD package, complete with CORMAC Q winch and sampler carousel - seen onboard the ARAMA 1.*