



New European Facility for Ultraclean Sampling of Trace Elements and Isotopes in the Oceans in the Geotraces Program

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Until now, the ultraclean sampling of ocean waters for trace elements has been very time-consuming by attachment of individual ultraclean bottle samplers one by one to a metal-free (e.g. all-Kevlar) hydrowire. Towards more rapid sampling, a novel rectangular frame was constructed of titanium, holding two rows of 12 samplers, as well as various sensors. Upon recovery the complete frame with samplers is placed inside an ultraclean van, where water is drawn via filters bottles. In a test in the Canary Basin excellent low Fe concentrations (0.1-0.4 nM) are consistent with previous values in same basin. The new gear will be used to sample sections at the Zero meridian and Drake Passage in 2008 International Polar Year Geotraces.