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Radiotracers for the study of Marine and Oceanic Ecosystems (Radiotrazadores para el estudio de Ecosistemas Marinos y Oceánicos: REMO)

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Since the beginning of the industrial revolution, the ocean has absorbed about one third of the carbon dioxide (CO2) released by human activity. This has led to an acidification of the oceans, which influences the physiology of aquatic organisms and, in general, the ecology of marine ecosystems. This is often called the other CO2 problem. The REMO project focuses on the study of marine species affected by acidification of waters, using radiotracers (starting with 45Ca) and nuclear instrumentation techniques to monitor the growth of mollusks and corals in simulated conditions. The novelty of the project is the non-destructive technique, allowing to observe the influence of the acidification as a function of the time, during typical periods of months or years. The project puts together the unique installations of the Valencia Oceanographic, the experience of their personnel, with the experience of marine scientist at the Institute Torre la Sal in Castellon, and of nuclear physicist at IFIC-Valencia and LNL-Legnaro-Italy.

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