## **Press Release**



15/2023

Using slaked lime to fight climate change

"The study aims to determine the threshold of alkalinity increase below which this process is ecologically sound," explains Professor Dr. Ulf Riebesell from GEOMAR Helmholtz Centre for Ocean Research Kiel, head of the study. These findings can help to identify the most suitable methods for applying the minerals. "In addition to the long-term storage of CO<sub>2</sub>, ocean alkalinisation has the positive side effect of counteracting ocean acidification," adds Professor Dr. Maarten Boersma, Spokesperson of the Biology Department at Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research and one of the lead scientists in the RETAKE consortium.

The results of the study will be incorporated into an overarching assessment of all ocean-based approaches for active  $CO_2$  removal carried out as part of the research mission CDRmare. "The CDRmare mission brings together the expertise of scientists from the natural sciences, social and political sciences, ethics and the law of the sea," explains Professor Dr. Andreas Oschlies, Earth system modeller at GEOMAR, coordinator of RETAKE and one of the speakers of CDRmare. "The results and assessments we obtain will help to provide a scientifically sound basis for decision-making on possible measures for active  $CO_2$  removal. Which measures will ultimately be taken to mitigate climate change must be decided in a process involving all societal sectors."

## Background: Marine carbon sinks in decarbonisation pathways (CDRmare):

In the research mission