

DYNAMITE

DYNAMics of the production and export of aragonITE shells

PRINCIPAL INVESTIGATORS: Julie MEILLAND, MARUM, Bremen Univ. (DE) / Olivier Sulpis, CEREGE (FR)
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PARTICIPANTS:

N. BEDNARSEK, Oregon State University, CIMERS (USA/SI) / F. BENEDETTI, ETH Zurich (CH) / S. CHAABANE, CEREGE (FR) and MPIIC (DE) / C. MANNO, The British Antarctic Survey (UK) / M. OHMAN, Scripps Institution of Oceanography, University of California (USA) / K. PEIJNENBURG, University of Amsterdam and Naturalis Biodiversity Center (NL) / R. SCHIEBEL, Max Planck Institute for Chemistry (DE) / D. WALL-PALMER, Naturalis Biodiversity Center (NL)

Planktonic organisms secreting a calcium carbonate (CaCO_3) shell play a **key, multi-faceted role in the oceans' ability to absorb CO_2 from the atmosphere.** One of the main mineral forms taken by CaCO_3 is called aragonite. **Surprisingly little is known about the aragonite cycle in the ocean.**

Aragonite is produced in modern oceans by pteropods, heteropods and janthinids, but the magnitude of this production is not quantified. Published estimates of aragonite's contribution to global CaCO_3 production in the modern ocean cover a very wide range, from 1% to 98%. Furthermore, the spatial distribution of aragonite production is unknown. This project aims to remedy this by bringing together an international group of scientists. These experts will synthesize and compile a unique and comprehensive database to **reveal the dynamics of aragonite shell production and export in the world ocean today and over recent decades.**

CESAB

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