Carina B. Lange

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I am a Professor at the Department of Oceanography, University of Concepción (Chile) since 2001 in charge of advancing the area of geological oceanography. I use the records of plankton communities (mainly diatoms) encoded in the marine sediments to interpret past ocean productivity in relation to climatic conditions. To assess the quality and accuracy of the information preserved in the sedimentary record, I also focus on the transformations associated

with the settling of biogenic material from the uppermost layers of the ocean to the seafloor. In recent years, when working in coastal areas, I have become interested in the role of diatom resting stages in population dynamics. This kind of studies as well as comparing molecular and morphological phylogenetic analyses of diatom taxa have strengthened my collaboration with the SZN, specifically with colleagues Drs. Marina Montresor, Diana Sarno and Adriana Zingone, and more recently with Dr. Wiebe Kooistra. Additionally, I have been a lecturer of the "Advanced Phytoplankton Course, Taxonomy and Systematics" (APC) since 1995.

Five most relevant publications

Schimmelmann, A., Lange, C.B., Schieber, J., Francus, P., Ojala, A.E.K, Zolitschka, B., 2016. Varves in marine sediments: A review. Earth-Science Reviews, http://dx.doi.org/10.1016/j.earscirev.2016.04.009

Aracena, C., Lange, C.B., Iriarte, J.L., Rebolledo, L., Pantoja, S., 2011. Latitudinal patterns of export production recorded in surface sediments of the Chilean Patagonian fjords (41-55°S) as a response to water column productivity. Continental Shelf Research 31(3-4), 340-355.

Montecino, V., Lange, C.B., 2009. The Humboldt Current System: Ecosystem components and processes, fisheries, and sediment studies. Progress in Oceanography 83(1-4), 65-79.

Lange, C.B., Weinheimer, A.L., Reid, F.M.H., Tappa, E., Thunell, R.C., 2000. Response of siliceous microplankton from the Santa Barbara Basin to the 1997-98 El Niño event. California Cooperative Oceanic Fisheries Investigations Reports 41, 186-193.

Lange, C.B., Berger, W.H., Lin, H.L., Wefer, G., 1999. Shipboard Scientific Party Leg 175. The early Matuyama Diatom Maximum off SW Africa, Benguela Current System (ODP Leg 175). Marine Geology 161, 93-114.