Record Nr. UNINA9910913774303321 Autore Horta Paulo Antunes Titolo Brazilian Rhodolith Beds: Oasis of Marine Biodiversity to be protected / / edited by Paulo Antunes Horta, Marina Nasri Sissini Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2024 Pubbl/distr/stampa **ISBN** 9783031614491 3031614496 Edizione [1st ed. 2024.] Descrizione fisica 1 online resource (217 pages) Collana Brazilian Marine Biodiversity, , 2520-1085 Altri autori (Persone) SissiniMarina Nasri Disciplina 577.77 Soggetti Biodiversity Conservation biology **Ecology** Plants - Evolution Water Hydrology Physical geography Conservation Biology Plant Evolution Earth System Sciences Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Chapter 1 Coralline red algae and rhodolith beds - a world natural heritage in the Southwestern Atlantic -- Chapter 2 -- Chapter 3 Rhodolith beds: occurrence, diversity, and evolution -- Chapter 4 Biodiversity associated with rhodolith beds in Brazil -- Chapter 5 Molluscs associated with rhodolith beds from the Southwestern Atlantic -- Chapter 6 Fossil and recent coralline algal bioconstructions and rhodoliths in the Brazilian shelf -- Chapter 7 Rhodolith beds mapping along Brazilian Continental Shelf -- Chapter 8 Major Threats to Rhodolith Beds – Ocean Acidification, Global Warming and Local Stressors.-Chapter 9 Contributions of rhodolith beds to people --Chapter 10 The legacy of Gilberto M. Amado-Filho to South Atlantic

Rhodolith Beds knowledge: memories of his students.

Sommario/riassunto

Rhodolith beds form biogenic reefs, oases of high biodiversity in sedimentary seabed environments. The rhodoliths are foundation species, which provide shelter and substrata for important and abundant benthic communities. Currently they have been recognized as an important player to the carbon balance, contributing to the planetarium climatic equilibrium. In Brazil, these environments are frequent and abundant and can be major carbonate 'factories' with a key role in the biogeochemical cycling of carbon in the South Atlantic Ocean. However, these organisms and environments are under threat from climate change, particularly ocean acidification and global warming, as well as local stressors such as fishing impacts and coastal run-off. In our book, written by dozens of researchers from different regions and expertise, you will dive more deeply in these and many other subjects related to this wonderful and vulnerable pink and dynamic underwater ecosystems.