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Nota di contenuto	1 Origin and Morphology of Ocean Basins -- 2 Origin and Morphology of Ocean Margins -- 3 Sources and Composition of Marine Sediments -- 4 Effects of Waves and Currents -- 5 Sea Level Processes and Effects of Sea Level Change -- 6 Productivity and Benthic Organisms — Distribution, Activity, and Environmental Reconstruction -- 7 Imprint of Climatic Zonation on Marine Sediments -- 8 Deep-Sea Sediments — Patterns, Processes, and Stratigraphic Methods -- 9 Paleoceanography — The Deep-Sea Record -- 10 Resources from the Ocean Floor -- Epilog -- List of Books and Symposia -- A1 Conversion Between Common US Units and Metric Units -- A2 Topographic Statistics -- A3 The Geologic Time Scale -- A4 Common Minerals -- A5 Grain Size Classification for Sediments -- A6 Common Rock Types -- A7 Geochemical Statistics -- A8 Radio-Isotopes and Dating -- A9 Systematic Overview for Major Groups of Common Marine Organisms

Sommario/riassunto

This textbook deals with the most important items in Marine Geology, including some pioneer work. The list of topics has grown greatly in the last few decades beyond the items identified by Eugen Seibold as central and now includes prominently such things as methane and climate change; that is, the carbon cycle and the Earth system as a whole. Relevant geophysical, geochemical, sedimentological and paleontological methods are shortly described. They should allow the reader to comment on new results about plate tectonics, marine sedimentation from the coasts to the deep sea, climatological aspects, paleoceanology and the use of the sea floor. The text tries to transmit to the reader excitement of marine geological research both aboard and in modern laboratories. Basic mineralogical, geochemical, biological and other relevant data and a detailed list of books and symposia are given in an Appendix. This Introduction builds on the third edition of "The Sea Floor" by E. Seibold and W.H. Berger. While much of the original text was written by Seibold, a considerable portion of the material presented in this edition is new, taking into account the recent great shift in marine geological research, some of it with great relevance to human concerns arising in a rapidly changing world. .
