

## BOOK REVIEW

### Seawater-Sediment Interactions in Coastal Waters—An Interdisciplinary Approach

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Oceanography is a multidisciplinary science. Usually an oceanographic problem is the result of the inter-play of biological, chemical, geological and physical processes. As such, ideally the problem should be tackled by techniques drawn from the above disciplines. This unfortunately is rarely the case and this book sets out to demonstrate what can be achieved if such a multidisciplinary approach is adopted.

The area selected for investigation is the Kiel Bight (area 2571 km<sup>2</sup>, maximum depth 36 m), a part of the transitional area between the Baltic and the North Sea. Chapter 1 of the book provides an account of the topography and sediment distribution of the Bight. Chapter 2 deals with the processes in the pelagic ecosystem, its annual cycle and its relationship with organic substrates and heterotrophic microbiological activity. Chapter 3 deals with benthic biology, especially its abundance and response to annual patterns of sedimentation. Chapter 4 is devoted to sediment and water chemistry and the results of experiments on diagenesis of organic matter and biological control of trace element chemistry.

Sediment transport processes under the action of waves and currents are dealt with in Chapter 5 and includes study of bed-forms by side scan sonar. The last one, Chapter 6, discusses carbonate production, its accumulation and transportation and relationship between live and dead components and a comparison with the classical area of the Bermuda carbonates. Unusual experimental systems such as the Plankton Tower for studying the processes within a captive water column and the Bell-Jar for studying nutrient release from sediments make the book especially interesting. Twenty-nine pages of useful references, an index and a large multi-coloured bathymetry map are included. The book can be considered as a fine example or a case history of the results of a 12 year multidisciplinary investigation and should be a required reading for those who plan similar studies.

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