

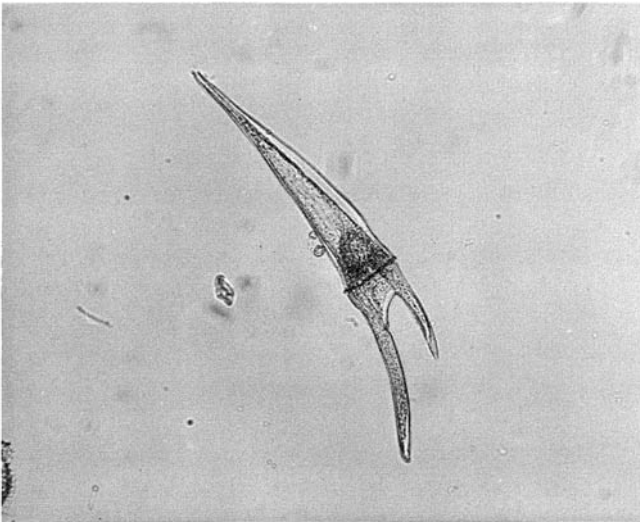
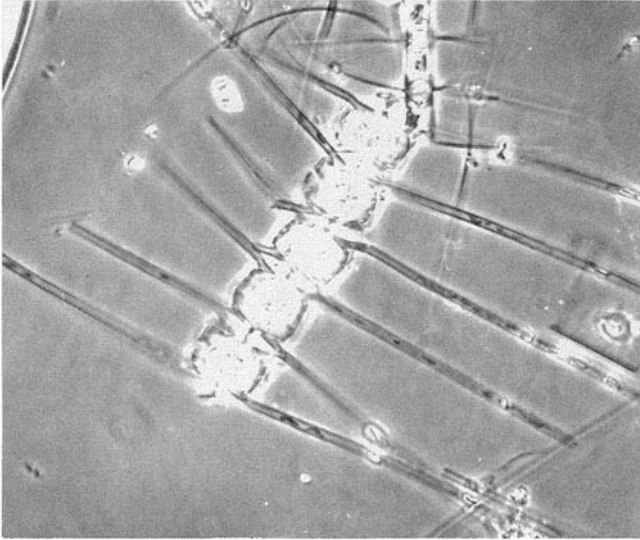
## BIOLOGICAL OCEANOGRAPHY AN EARLY HISTORY, 1870–1960

First published in 1989, Eric L. Mills's comprehensive history of biological oceanography has been praised as "superb" (*BioScience*) and "proof that history need not be dull" (*The Northern Mariner*). This first history of the field, which chronicles the scientific work and creativity of its chief contributors, tells a riveting story that is far from narrowly scientific and is thoroughly accessible to general readers.

Mills shows how the work and ideas of the main actors are inseparable from seemingly unrelated factors that include Prussian imperialism, agricultural chemistry, microbiology, and the problems of German universities. Mills also illustrates the significant roles played in the field's development by the failures of commercial fisheries, the development of analytical chemistry, the establishment of international scientific organizations, and sheer scientific curiosity.

This new edition of *Biological Oceanography* includes a fresh introduction by the author, as well as a foreword by noted oceanographer John Cullen. The book makes an excellent companion to Mills's recent history of mathematical and physical oceanography, the multi-award-winning and widely acclaimed *The Fluid Envelope of Our Planet*.

ERIC L. MILLS is a professor emeritus in the Department of Oceanography at Dalhousie University and former director of the History of Science and Technology Program at the University of King's College. He is the winner of the Jehuda Neumann Memorial Prize for the History of Meteorology and Physical Oceanography from the Royal Meteorological Society.



Phytoplankton, namely, the diatom *Chaetoceros rostratum* (above, magnified 400 $\times$ ) and the dinoflagellate *Ceratium schroeteri* (below, magnified 500 $\times$ ), from the Mediterranean Sea. Characterized by Victor Hensen as “blood of the sea,” green photosynthetic cells like these were the subject of early work on biological oceanography in Germany, Monaco, Great Britain, and the United States. Photographs courtesy of Guy L ger, Universit  de Nice, France.

# BIOLOGICAL OCEANOGRAPHY

An Early History, 1870–1960

ERIC L. MILLS

With a foreword by John Cullen and a new introduction by the author

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Oceanography is not so much a science as a state of mind.

ELIZABETH NOBLE SHOR 1978

In recognition of the pioneers of quantitative biological oceanography

Victor Hensen  
Karl Brandt  
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