Introduction

The 14th volume of the Annual Review of Marine Science continues the tradition of presenting diverse and topical reviews in the basic marine science disciplines of physics, chemistry, biology, and geology in the oceans. It is fitting that this year's autobiographical article was written by George Somero, a pioneer in the study of biochemical adaptations to the environment, because found throughout the volume are articles about the biochemistry and physiology of marine organisms and articles about environmental change in marine systems. In "The Goldilocks Principle: A Unifying Perspective on Biochemical Adaptation to Abiotic Stressors in the Sea," Professor Somero explains that evolution is often about getting it "just right." In other articles, David Hutchins and Sergio Sañudo-Wilhelmy address the enzymology of ocean global change, and Robert Morris and Rachel Spietz explore the adaptations of microbial cells to life in oxygen minimum zones. Other articles cover the oceans at larger scales—for example, the history of ocean oxygenation is reviewed by Christopher Reinhard and Noah Planavsky, and Anja Engel and colleagues discuss the consequences of organic matter flux and the formation of ocean oxygen minimum zones. In "Argo—Two Decades: Global Oceanography, Revolutionized," Greg Johnson and coauthors review the advances in our understanding of ocean biogeochemistry and ecology brought about by the Argo float program. Throughout this volume are scientific reports that expand our basic understanding of ocean processes—from physics and geology to geochemistry and molecular

We again acknowledge and thank the authors for their outstanding contributions and the Editorial Committee members who help select them. We also thank you, the marine science community, for your continued support, and we welcome your feedback.

The Editors



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