

CONTENTS

Chapter 1 Introduction	1
Chapter 2 Physicochemical Properties of Nitrogen	7
Chapter 3 Nitrogen Isotopes	17
Chapter 4 Components, Systems, and Processes	39
Chapter 5 Abundance and Distribution of Nitrogen in the Sea and Their Physical, Chemical, and Biochemical Regulation	63
Chapter 6 Nitrogen Dynamics in Various Oceanic Systems	95
Chapter 7 Variation of $^{15}\text{N}/^{14}\text{N}$ in Nitrogen Cycling and Its Significance in Marine Environments	141
Chapter 8 Future Studies on Nitrogen Dynamics	177
References	185