Record Nr. UNINA9910826305303321 Biogeochemistry of marine dissolved organic matter / / edited by **Titolo** Dennis A. Hansell, Craig A. Carlson Pubbl/distr/stampa Amsterdam; ; Boston, : Academic Press, c2002 **ISBN** 1-281-03665-X 9786611036652 0-08-050011-0 Descrizione fisica 1 online resource (807 pages) Altri autori (Persone) HansellDennis A CarlsonCraig A Disciplina 551.46/01 Soggetti Seawater - Organic compound content Chemical oceanography Biogeochemistry Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Front Cover; Biogeochemistry of Marine Dissolved Organic Matter; Copyright Page; Contents; Contributors; Foreword; Preface; Chapter 1. Why Dissolved Organics Matter?; I. Introduction; II. DOM Research Pre-1970; III. DOM Research in the 1970's; IV. DOM Research in the 1980's; V. ""New"" DON and DOC; VI. Why Dissolved Organics Matter; VII. What did we Learn?: References: Chapter 2. Analytical Methods for Total DOM Pools; I. Introduction; II. Dissolved Organic Carbon Analysis; III. Dissolved Organic Nitrogen Analysis; IV. Dissolved Organic Phosphorus Analysis: V. Multielemental Methods VI. The Limits of Elemental Analyses VII. The Need for Continual use of Reference Materials; References; Chapter 3. Chemical Composition and Reactivity; I. Introduction; II. Distribution and Chemical Characteristics of Bulk Marine DOM; III. Major Topics of Ongoing and Future Research About the Cycling of DOM; References; Chapter 4. Production and Removal Processes; I. Introduction; II. DOM Production Processes; III.

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Sommario/riassunto

Interest in marine dissolved organic matter (DOM) is very high because it plays an important role in oceanic and global carbon cycling, which in turn impacts weather. Understanding the processes involved in the transformations of carbon, phosphorus, nitrogen, and other major elements in the oceans has been a primary goal of marine biogeochemists and oceanographers over the past decade. This book, in 16 chapters with over 170 figures and tables, reports on the major advances in this area by a distinguished group of international chemical and biological oceanographers.