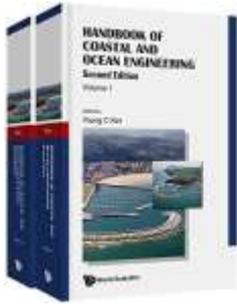




## Handbook of Coastal and Ocean Engineering 2 Volumes



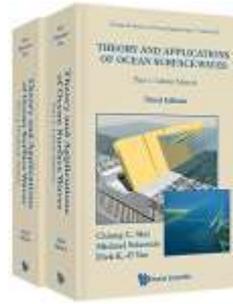
v pevné vazbě, 1900 stran  
vyd. World Scientific, 2.vydání,  
XII/2017  
ISBN 9789813204010

katal.cena cca 13.960 Kč vč.DPH  
v této nabídce **11.160 Kč** vč.DPH

This handbook contains a comprehensive compilation of topics that are at the forefront of many of the technical advances in ocean waves, coastal, and ocean engineering. More than 70 internationally recognized authorities in the field of coastal and ocean engineering have contributed articles on their areas of expertise to this handbook. These international luminaries are from highly respected universities and renowned research and consulting organizations from all over the world. This handbook provides a comprehensive overview of shallow-water waves, water level fluctuations, coastal and offshore structures, port and harbors, coastal sediment processes, environmental problems, coastal hazards, physical modeling, and other issues in coastal and ocean engineering.

It is an essential reference for professionals and researchers in the areas of coastal engineering, ocean engineering, oceanography, and meteorology, as well as an invaluable text for graduate students in these fields.

## Theory and Applications of Ocean Surface Waves 2 Volumes

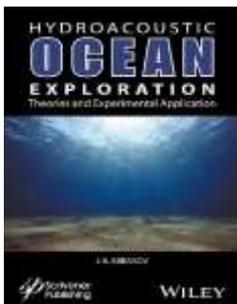


v pevné vazbě, 1500 stran  
vyd. World Scientific, 3.vydání,  
IX/2017  
ISBN 9789813147171

katalog.cena cca 5.580 Kč vč.DPH  
v této nabídce **4.490 Kč** vč.DPH

This book set is a revised version of the 2005 edition of Theory and Applications of Ocean Surface Waves. It presents theoretical topics on ocean wave dynamics, including basic principles and applications in coastal and offshore engineering as well as coastal oceanography. Advanced analytical and numerical techniques are demonstrated. In this revised version, five chapters on recent developments in linear and nonlinear aspects have been added. The first is on detailed analyses in Wave/Structure Interactions. The second is a new section on Waves through a Marine Forest, a topic motivated by its possible relevance to tsunami reduction. The third is on Long Waves in Shallow Water and the fourth is an update on Broad-Banded Nonlinear Surface Waves in the Open Sea to include new findings in this topic. The fifth is an expanded chapter on Numerical Simulation of Nonlinear Wave Dynamics to include predictions of nonlinear spectral evolution and rogue wave occurrence and dynamics using large-scale phase-resolved simulations. This revised version also includes recent developments in precorrected-FFT accelerated  $O(N \log N)$  low- and high-order boundary element methods for the computation of fully nonlinear wave-wave and wave-body interactions. Theory and Applications of Ocean Surface Waves (2016) will be invaluable for graduate students and researchers in coastal and ocean engineering, geophysical fluid dynamicists interested in water waves, and theoretical scientists and applied mathematicians wishing to develop new techniques for challenging problems or to apply techniques existing elsewhere.

## Hydroacoustic Ocean Exploration

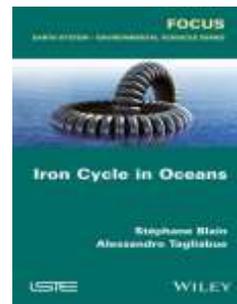


v pevné vazbě, 192 stran  
vyd. John Wiley & Sons, XI/2016  
ISBN 9781119323549

katalog.cena cca 5.300 Kč vč.DPH  
v této nabídce **4.240 Kč** vč.DPH

The only book that offers a comprehensive and fully up-to-date coverage of hydroacoustic ocean exploration, this work deals with the diagnostics of non-uniformities in a water medium using the hydroacoustic parametric antenna. The non-uniformities of the water medium in the study are of geometrically regular shape, i.e., the shape of a sphere, a cylinder, and a spheroid. An account is given of theoretical and experimental studies of wave processes that occur in the event of the scattering of non-linearly interacting acoustic waves at a sphere, a cylinder, and a spheroid. Scattering problems are formulated; solutions to the inhomogeneous wave equation are found in the first and second approximations using the successive approximations method. For the first time, high-frequency asymptotic expressions of acoustic pressure for all spectral components of the secondary field are obtained for the nonlinear scattering problem. The scattering diagrams are calculated and plotted, and then analyzed and compared. Results of experimental studies of the parametric acoustic antenna field scattering at solid steel spheres are presented. Experimental scattering diagrams both for the parametric antenna pump waves and for the secondary field waves including the difference frequency wave, the sum frequency wave, and the second harmonic wave are presented. 3D modeling of wave processes is also considered. A must have for researchers and specialists in nonlinear hydroacoustics and ocean acoustics; it also may be of use for postgraduates and students specializing in hydroacoustics and ocean exploration.

## Iron Cycle in Oceans

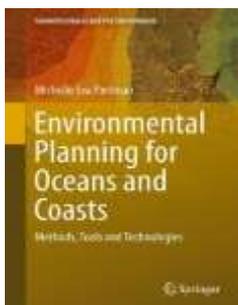


v měkké vazbě, 132 stran  
vyd. ISTE and John Wiley & Sons,  
XII/2016  
ISBN 9781848218147

katalog.cena cca 3.280 Kč vč.DPH  
v této nabídce **2.620 Kč** vč.DPH

This book presents an up to date view of iron biogeochemistry in the ocean. It encompasses the description of iron speciation, the analytical methods used to measure the different iron forms in seawater and the different iron biogeochemical models.

## Environmental Planning for Oceans and Coasts

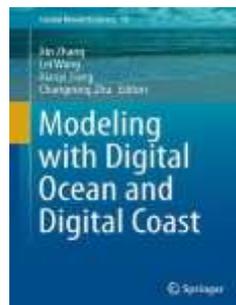


v pevné vazbě, 237 stran  
vyd. Springer, V/2016  
ISBN 9783319269696

katalog.cena cca 3.840 Kč vč.DPH  
v této nabídce **3.060 Kč** vč.DPH

This book informs environmental planning professionals, students and those interested in oceans and coasts from an environmental perspective about what is needed for planning and management of these unique environments. It is comprised of twelve chapters organized in three parts. Part I highlights the basic tenets of environmental planning for oceans and coasts including important concepts from the general field of planning and coastal and ocean management (e.g., hydrography, oceans policy and law, geomorphology). Environmental problems inherent within oceans and coasts (such as sea level rise, marine pollution, overdevelopment, etc.) are also addressed, especially those at the land-sea interface. Part II covers those methodological approaches regularly used by planners working to improve environmental quality and conditions of oceans and coasts among them: integrated planning and management, ecosystem services, pollution prevention, and marine spatial planning. Part III focuses specifically on state-of-the-art tools and technologies employed by planners for marine and coastal protection. These include systematic conservation planning for protected areas, decision support tools, coastal adaptation techniques and various types of communication, including visualization, narration and tools for stakeholder participation. The final chapter in the book reviews the most important concepts covered throughout the book and emphasizes the important role that environmental planners have to play in the protection and well-being of oceans and coasts.

## Modeling with Digital Ocean and Digital Coast

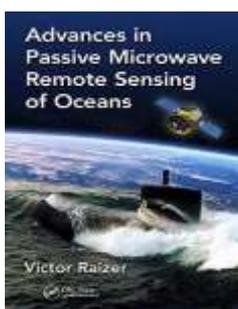


v pevné vazbě, 234 stran  
vyd. Springer, IX/2016  
ISBN 9783319427089

katalog.cena cca 4.430 Kč vč.DPH  
v této nabídce **3.540 Kč** vč.DPH

This book presents essential new insights in research and applications concerning spatial information technologies and coastal disaster prevention modeling for oceanic and coastal regions. As a new research domain of Digital Earth, it covers the latest scientific and technical advances, from the acquisition and integration of observational data, ocean spatio-temporal analysis and coastal flood forecasting to frequency modeling and the development of technical platforms. The individual chapters will be of interest to specialists in oceanic and coastal monitoring and management who deal with aspects of data integration, sharing, visualization, and spatio-temporal analysis from a Digital Earth perspective.

## Advances in Passive Microwave Remote Sensing of Oceans



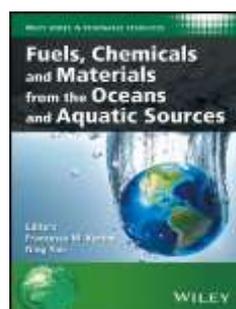
v pevné vazbě, 292 stran  
vyd. CRC Press, III/2017  
ISBN 9781498767767

katalog.cena cca 3.880 Kč vč.DPH  
v této nabídce **3.090 Kč** vč.DPH

This book demonstrates the capabilities of passive microwave technique for enhanced observations of ocean features, including the detection of (sub)surface events and/or disturbances while laying out the benefits and boundaries of these methods. It represents not only an introduction and complete description of the main principles of ocean microwave radiometry and imagery, but also provides guidance for further experimental studies. Furthermore, it expands the analysis of remote sensing methods, models, and techniques and focuses on a high-resolution multiband imaging observation concept.

Such an advanced approach provides readers with a new level of geophysical information and data acquisition granting the opportunity to improve their expertise on advanced microwave technology, becoming now an indispensable tool for diagnostics of ocean phenomena and disturbances.

## Fuels, Chemicals and Materials from Oceans and Aquatic Sources



v pevné vazbě, 304 stran  
vyd. Wiley-Blackwell, VI/2017  
ISBN 9781119117162

katalog.cena cca 3.400 Kč vč.DPH  
v této nabídce **2.720 Kč** vč.DPH

Fuels, Chemicals and Materials from the Oceans and Aquatic Sources provides a holistic view of fuels, chemicals and materials from renewable sources in the oceans and other aquatic media. It presents established and recent results regarding the use of water-based biomass, both plants and animals, for value-added applications beyond food. The book begins with an introductory chapter which provides an overview of ocean and aquatic sources for the production of chemicals and materials.

Subsequent chapters focus on the use of various ocean bioresources and feedstocks, including microalgae, macroalgae, and waste from aquaculture and fishing industries, including fish oils, crustacean and mollusc shells. Fuels, Chemicals and Materials from the Oceans and Aquatic Sources serves as a valuable reference for academic and industrial professionals working on the production of chemicals, materials and fuels from renewable feedstocks. It will also prove useful for researchers in the fields of green and sustainable chemistry, marine sciences and biotechnology.

Topics covered include: \* Production and conversion of green macroalgae \* Marine macroalgal biomass as an energy feedstock \* Microalgae bioproduction \* Bioproduction and utilization of chitin and chitosan \* Applications of mollusc shells \* Crude fish oil as a potential fuel