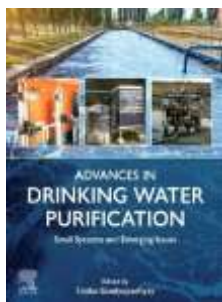


## Advances in Drinking Water Purification



v měkké vazbě, 496 stran  
vyd. Elsevier, I/2024  
ISBN 9780323917339

katalog.cena 5.320 Kč  
v této nabídce **3.980 Kč**

Advances in Drinking Water Purification: Small Systems and Emerging Issues captures the knowledge and impact on the performance of various types of water purification technologies and identifies the need for further development with a view to carry forward the SDG global targets of achieving safe and affordable drinking water. The book bridges the knowledge gap between various types of treatability options which is essential for selection of suitable treatment systems and augmentation in the desirable levels of specific contaminants. It focuses on providing the scope of selecting location specific technology options by presenting multiple approaches for treatment of most crucial toxic contaminants/pathogens.

In addition, it provides insights into the effect of nature of impurities and selection of treatment options on the global quality of drinking water, comprising its possible impacts on the efficiency of the techniques used and thus on the safety of drinking water. This information is indispensable in identifying the appropriate technology depending on the socioeconomic conditions to address the problem of decontamination in drinking water.

## Application of Nanotechnology for Resource Recovery from Wastewater



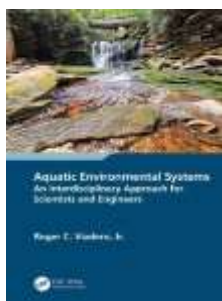
v pevné vazbě, 332 stran  
vyd. Taylor & Francis Ltd, II/2024  
ISBN 9781032009131

katalog. cena 4.290 Kč  
v této nabídce **3.200 Kč**

Most of the time, industrial wastes contain recoverable resources that would be useful in other applications. For example, greywater have enough nutrient to support the growth of microalgal biomass that are useful for biofuel production. Similarly, solid waste generated in metal extraction industries often contain high concentration of other metals that could be extracted using various processes.

This book presents a critical overview on the current nanotechnologies that are being utilized for extraction of valuable resources from various industrial and domestic wastes. This book presents research, reviews, and case studies on the extraction of metal, organic compounds, energy and nutrients from waste through nanotechnological interventions.

## Aquatic Environmental Systems



v pevné vazbě, 144 stran  
vyd. Taylor & Francis Ltd, XII/2023  
ISBN 9781032267180

katalog.cena 2.220 Kč  
v této nabídce **1.650 Kč**

Considering that environmental science draws students and practitioners with widely varied backgrounds, there is a need for materials that help readers to grow their knowledge of fundamental principles from chemistry, physics, and biology to understand, describe, and predict the ways in which constituents (sediment, nutrients, organic matter, etc.) interact and move in aquatic systems (rivers, lakes, groundwater, and the atmosphere). Aquatic Environmental Systems: An Interdisciplinary Approach for Scientists and Engineers focuses on developing a common vocabulary and a rigorous material balance-based approach to understanding these movements and interactions. It examines the key properties of water and the ways they impact the behavior of water in the environment, providing a focused enumeration of those aspects of water structure that have direct and profound impacts on aquatic environmental systems. Features: Provides open-ended exercises to allow students to tailor work to their personal local/regional interests. Focuses on conveying understanding of the underlying principles and assumptions/limitations which are frequently underemphasized or overlooked entirely in other books. Deemphasizes straight memorization while focusing on methods that can be applied to more broad-based problem solving. Accommodates a wide range of mathematics skills and backgrounds.

## Development in Wastewater Treatment Research and Processes



v měkké vazbě, 382 stran  
vyd. Elsevier, III/2024  
ISBN 9780443192074

katalog.cena 5.320 Kč  
v této nabídce **3.980 Kč**

Development in Wastewater Treatment Research and Processes: Emerging Technologies for Removal of Pharmaceuticals and Personal Care Products: State of the Art, Challenges and Future Perspectives provides a holistic overview on the recent advances and challenges associated with pharmaceuticals and personal care products (PPCP) removal from water and wastewater. The book covers advanced remediation technologies such as microbial fuel cells (MFCs), microalgae, and hybrid technologies, and focuses on the environmental sustainability of each technology, using lifecycle assessment. This book will help students and researchers in carrying out research on further advancements in the field, also helping them apply this to the real-world conditions.

## Drinking Water Disinfection By-products



v pevné vazbě, 289 stran  
vyd. Springer, II/2024  
ISBN 9783031490460

katalog.cena 4.300 Kč  
v této nabídce **3.200 Kč**

This book is devoted to water treatment and it outlines the historical context and regulatory framework surrounding drinking water chlorination, addressing disinfection by-products (DBPs) formation, associated challenges and implications on water quality and human health. In this book, readers will find an overview of various disinfection processes and the latest strategies in DBPs detection and remediation. Divided into 14 chapters, the book begins by offering a background analysis of water disinfection and comparing different disinfection processes and management strategies to mitigate the formation of DBPs.

Particular attention is given to both conventional and non-conventional methods used to treat potable water, comparing their effectiveness and potential risks. In subsequent chapters, expert contributors outline the route of exposure and mechanism of action of DBPs, and the toxicological impact of DBPs on human health, providing essential insights for effective risk management strategies. This book also showcases the latest advancements in chlorine applications for water quality control and explores innovative physicochemical and nanotechnology-based approaches to remove DBPs and minimize their formation.

## Electrochemical Water Splitting



v pevné vazbě, 263 stran  
vyd. Springer, III/2024  
ISBN 9789819998593

katalog.cena 4.040 Kč  
v této nabídce **3.020 Kč**

This book provides a comprehensive platform for the research, scientific and educational communities working on electrocatalysis. It covers water electrolysis from different fields of catalysis research, deals with the fundamentals and critically discusses the precise and correct use of evaluating parameters and their calculation for a fair evaluation. Readers find an analysis to probe the origin of different bottlenecks in water electrolysis and scientific methods to enhance the electrode selectivity with high intrinsic activity, effective mass and electron transfer ability, abundant active sites with super hydrophilicity-aerophobicity characteristics and structural, mechanical and chemical stability with high corrosion resistance.

## Flood Risk and Community Resilience



v měkké vazbě, 22 stran  
vyd. Taylor & Francis Ltd, II/2024  
ISBN 9781138954472

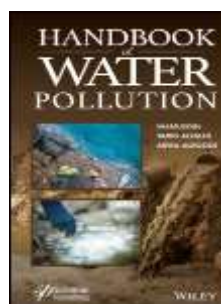
katalog.cena 1.070 Kč  
v této nabídce **780 Kč**

This book details the impact of flooding on our environment, and the ways in which communities, and those that work with them, can act to manage the associated risks. Flooding is an increasingly significant environmental hazard which inflicts major costs to the economies and livelihoods of developed countries. This book explores how local communities can identify, manage, and adapt to the ever-increasing damage flooding causes.

Focusing on the future role of local communities, the benefits and challenges of their involvement, and the potential areas of transformation, this book provides insights into the efficacy of interdisciplinary and transdisciplinary working. Alongside research into similar environmental hazards, this book also draws upon the author's own knowledge of flood risk management in distinctive non-contiguous interdisciplinary settings. The chapters draw together a different and distinctive set of interdisciplinary themes in flood risk management and social resilience.

In doing so, it strives to communicate the different ways of thinking that can usefully contribute to flood risk management. This book would be ideal for those researching flood risk management, alongside scholars and non-scholars alike who are interested in finding ways of adapting to environmental hazards working with local communities.

## Handbook of Water Pollution



v pevné vazbě, 560 stran  
vyd. John Wiley & Sons Inc, III/2024  
ISBN 9781119904809

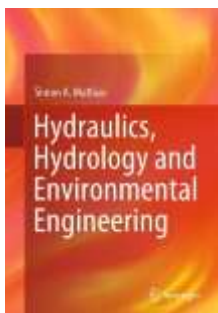
katalog.cena 5.590 Kč  
v této nabídce **4.180 Kč**

HANDBOOK of WATER POLLUTION Handbook of Water Pollution discusses a wide range of contaminants heavily affecting our environment and water bodies. The chapters discuss heavy metals, metalloids, pesticides, explosives, toxic chemicals, dyes, plastics, e-wastes, fertilizers, detergents, nitrates/nitrites, phosphates, hydrocarbons, and fecal wastes, along with their sources of action against our environment, their methods of analysis, and finally, their treatments are all presented in detail. Our environment is heavily affected due to extreme human activities.

Environmental pollution is a major concern worldwide. Within this, water pollution is one of the major challenges that puts the total ecology at risk. Water pollution is alarming everywhere; many governing authorities believe it is also an unavoidable result of human activity

However, the economic cost of water pollution far outweighs the benefits of skimping on its cause. Water pollution is not just merely related to financial cost but related to all living beings. Toxic waste is getting into the water bodies in various regions, causing many illnesses in humans and poisoning other living things.

## Hydraulics, Hydrology and Environmental Engineering



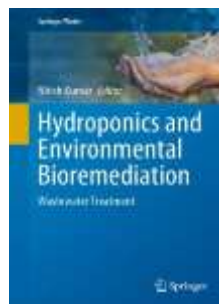
v pevné vazbě, 749 stran  
vyd. Springer, II/2024  
ISBN 9783031419720

katalog.cena 2.530 Kč  
v této nabídce **1.770 Kč**

This textbook provides an excellent resource for engineering and science students to develop basic, intermediate and advanced level skills in hydraulics, hydrology and environmental engineering. Topics include open channel flow, ocean waves, kinematic wave modelling, flood forecasting, groundwater production, evapotranspiration, rainfall runoff modelling, cost benefit analysis, environmental evaluation, air quality control, carbon capture and storage, atmospheric dispersion, water pollution, water treatment, wastewater treatment, environmental impact assessment and uncertainty management. Hydrology and environmental engineering are treated as clear extensions of fluid mechanics and thermodynamics.

Emphasis is placed on distinguishing between theoretical and empirical results. Written challenges are specified throughout the text to help readers derive important theoretical results for themselves. Each chapter includes a set of related practical problems with detailed worked solutions, many of which include short, self-contained MATLAB codes.

## Hydroponics and Environmental Bioremediation



v pevné vazbě, 407 stran  
vyd. Springer, II/2024  
ISBN 9783031532573

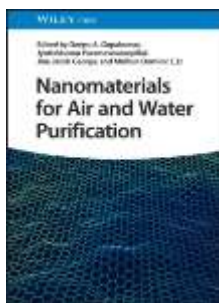
katalog.cena 5.060 Kč  
v této nabídce **3.780 Kč**

Bioremediation is the use of biological interventions for mitigation of the noxious effects caused by pollutants in the environment including wastewater. It is very useful approach for a variety of applications in the area of environmental protection. It has become an attractive alternative to the conventional clean-up technologies that employ plants and their associated microorganisms to remove, contain, or render harmless environmental contaminants.

Hydroponic systems, which utilize plants which are grown in a nutrient solution without soil, are expanding and raising great interest in the commercial and scientific community. They are engineered systems designed and constructed to utilize the natural processes involving macrophytes, media, and the associated microbial assemblages to assist in treating wastewaters. This is a relatively new approach in wastewater treatment by which a variety of emergent macrophytes are grown hydroponically on top of floating platforms with their roots developing freely into the flowing wastewater.

The roots provide a support medium for attached microbial growth which participates in the treatment process.

## Nanomaterials for Air and Water Purification



v pevné vazbě, 432 stran  
vyd. Wiley-VCH Verlag GmbH, III/2024  
ISBN 9783527350520

katalog.cena 4.140 Kč  
v této nabídce **3.100 Kč**

Nanomaterials for Air and Water Purification A comprehensive primary resource for researchers interested in nanocomposites for environmental remediation In Nanomaterials for Air and Water Purification, a team of distinguished researchers delivers an expert compilation of resources dealing with nano-based research for air and water remediation. The editors have included works by reputed researchers covering characterization, fabrication, and applications. This book is intended as a primary reference for researchers in academia and industry to offer original insights into environmentally friendly polymers and their nanocomposites.

It provides comprehensive discussions of the fundamentals, attributes, characteristics, and fabrication of the materials and composites relevant to these nanomaterials. Readers will also find: Thorough introductions to electrospun nanofiber membranes for effective air filtration and nanocomposite air filter membranes Comprehensive explorations of photocatalytic materials and technologies for air purification Practical discussions of opportunities for improving and protecting water supplies with nanomaterials Fulsome treatments of polymeric membranes incorporated with metal or metal oxide nanoparticles for water purification Perfect for environmental, polymer, and surface chemists, Nanomaterials for Air and Water Purification will also earn a place in the libraries of industry professionals with an interest in water and air purification.

## Science of Lakes - Multidisciplinary Approach



v pevné vazbě, 272 stran  
vyd. IntechOpen, I/2024  
ISBN 9781837690411

katalog.cena 3.550 Kč  
v této nabídce **2.490 Kč**

Lakes are among the most extensive freshwater aquatic ecosystems in the world. Their evolution results from the interactions of numerous natural and anthropogenic factors. This book includes 12 chapters and presents case studies on the impacts of changes and tectonic movements on the evolution of lake water levels (Section 1), the interactions between anthropogenic activities and the physicochemical characteristics of lakes (Section 2), and the limnological characteristics and their interactions with other components of the environment (Section 3).

## Water and Waste Regulation



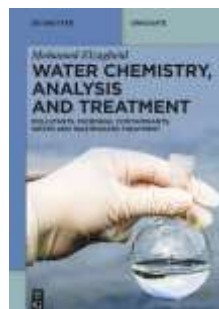
v měkké vazbě, 480 stran  
vyd. Bloomsbury Publishing, II/2024  
ISBN 9781526518996

katalog.cena 4.290 Kč  
v této nabídce **3.200 Kč**

Water pollution law is the most developed of the pollution control systems. This title contains a comprehensive account of water and waste legislation plus a detailed interpretation of the relevant statutory provisions and associated case law. This book includes:- A detailed interpretation of the relevant statutory provisions and associated case law- The impact of Brexit on current regulations- Discussions surrounding UK desalination plants, end of life vehicles and nature conservation- The changes in international regulations and the impact that this has on UK water and waste regulation- The regulation of water quality standards, water pollution control, fisheries, navigation, flood, coastal protection and marine pollution with a wide range of water pollution offences. The detailed treatment of the issues involved will enable environmental and energy law practitioners to feel confident in what is a complicated area of law.

This title is included in Bloomsbury Professional's Environmental Law online service.

## Water Chemistry, Analysis and Treatment



v měkké vazbě, 139 stran  
vyd. De Gruyter, XII/2023  
ISBN 9783111332420

katalog.cena 1.770 Kč  
v této nabídce **1.320 Kč**

Water chemistry, water sources, water pollutants, and microbiological contaminants are all covered in the book. The basic concepts of water chemistry are well taught. Along with stormwater management and green infrastructure, the book also examines the theoretical underpinnings of a number of water treatment and analysis procedures.

Graduate and advanced undergraduate students, environmental researchers, chemists, and lab technicians who work in water and environmental laboratories could all benefit from this book. Chemical engineers and operators are the primary target audience for the majority of books on the market, thus both technicians and chemists can gain a lot from this book.

## Water Politics: Fragmentation of Western Water Policy



v pevné vazbě, 200 stran  
vyd. Taylor & Francis Ltd, XI/2023  
ISBN 9781032377292

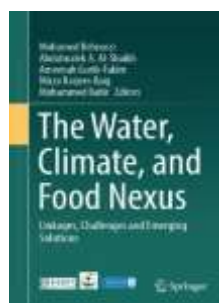
katalog.cena 3.840 Kč  
v této nabídce **2.860 Kč**

This book is about the enactment, adaption, and ultimately fragmentation of government policy regarding the use of water in the American west. It describes its origins, how it became about building big projects, and how it was fragmented by pressures from environmental activism. The book also explores the western water crisis in the United States.

The case studies used in here will help readers understand water development and the political battles around it in most of the western states to show here how and why the policy changed and even broke down. The book is divided into two parts and describes the different eras of water policy. While most books on water policy focus on its deficiencies for meeting future challenges, Water Politics: The Fragmentation of Western Water Policy attempts to explore why those deficiencies occurred in the first place.

The book is intended for undergraduate and graduate students in political science and policy studies who are interested in how public policies are enacted, how they change, and how they fall apart over time and why. The book will also be of particular interest to students in other disciplines that deal with water such as environmental studies, geology, sociology, hydrology, and civil engineering.

## Water, Climate and Food Nexus



v pevné vazbě, 476 stran  
vyd. Springer, II/2024  
ISBN 9783031509612

katalog.cena 3.790 Kč  
v této nabídce **2.840 Kč**

This contributed book, as a part of a series of CERES publications, provides a multi-regional and cross-sectoral analysis of the interlinkages, challenges, and emerging responses in the areas of water security, climate change, and food systems, especially in a context marked by severe implications of the COVID-19 pandemic, increased climate vulnerability of many regions already water stressed, and an ambitious global action aiming at curbing climate change and restoring ecosystem. In the first set of chapters, the water, food, and environmental/climate security nexus is explored theoretically and by reference to empirical research covering many regions and sectors. In another set of chapters, the impacts of climate change on water resources and water-stressed regions are identified along with their implications for food systems and security. Other chapters of the volume identify the emerging solutions to the nexus challenges, mainly adaptation and mitigation options, governance and management approaches, technological and economic solutions, innovative farming and water management practices, etc.

Most chapters scheduled for publication address timely and future-oriented topics, are based on empirical research particularly done in water-constrained and climate vulnerable countries from Asia, Africa, and the MENA region, and provide policy-oriented inputs and recommendations to guide change processes at multiple scales.