

CRC PRESS • TAYLOR & FRANCIS

Apple Academic Press

Essential Frontlist & Recently Published • 2022



Apple Academic Press

Essential Frontlist & Recently Published • 2022

CONTENTS

NEW, RECENT & FORTHCOMING TITLES

Agricultural Science	3-7
Animal Science	8
Architecture	8
Biomedical Engineering & Biotechnology.....	9-10
Biology & Related Areas	11-12
Business Management & Human Resources	13-14
Chemistry & Chemical Engineering	15-16
Clinical & Experimental Medicine	12
Computer & Information Science / Internet Technology / Electronic Communications & Engineering	17-20
COVID-19 & Pandemic Studies	21
Education & Teaching	22
Energy Science	23
Environmental Science & Climate Change	24-25
Fisheries & Marine Science	26
Food Science, Food Chemistry & Food Design.....	27-29
Hospitality, Travel & Tourism	30-31
Law & Criminal Justice	32
Library Science	32
Materials, Polymer Science & Nanomaterials	33-34
Mathematics	35
Mechanical Engineering	36
Medicinal Plants / Alternative & Complementary Medicine / Nutraceuticals & Functional Foods	37-39
Nanoscience & Nanotechnology.....	40-41
Optical & Molecular Physics	47
Pharmaceutical Science & Drug Development	42-44
Plant Science & Botany.....	45-46
Psychology, Psychiatry & Mental Health.....	47
Water Resources & Management	48
Waste Management	49
About Apple Academic Press.....	50
Editorial Inquiries.....	51
Ordering Information.....	51

AGRICULTURAL SCIENCE

ADVANCES IN COTTON SCIENCE

Botany, Production, and Crop Improvement

Ratikanta Maiti, Autonomous University of Nuevo León, Mexico

Ch. Aruna Kumari, Professor Jaya Shankar
Telangana State Agricultural University, India

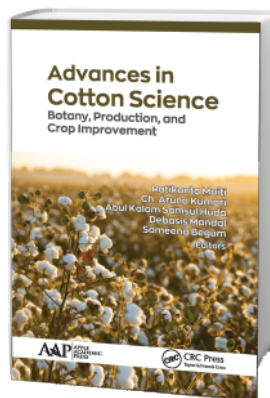
With Abul Kalam Samsul Huda, Debashis Mandal,
and Sameena Begum

A rich resource on the cultivation and production of cotton. It provides an overview of its origin and evolution and its physiological basis and characterization, and goes on to discuss methods of cultivation, biotic stresses, harvesting and postharvest technology, and new research on breeding and biotechnology.

364 pages with index. 6 color and 19 b/w illustrations.

HB ISBN: 978-1-77188-819-6 / eBook ISBN: 9780429283987

\$169.95 US / £131.00. April 2020.



ADVANCES IN SORGHUM SCIENCE

Botany, Production, and Crop Improvement

Ratikanta Maiti, and

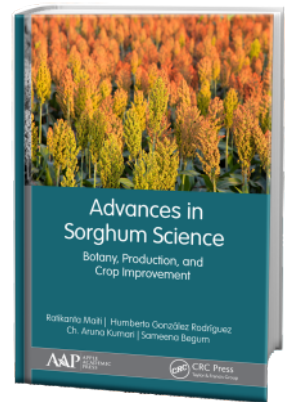
Humberto González Rodríguez,
Universidad Autonoma de Nuevo Leon, Mexico

With Humberto González Rodríguez,
Aruna Kumari, and Sameena Begum

Provides an easy-to-read and comprehensive treatment of the sorghum crop, providing detailed information from several disciplines. It covers the various aspects of the sorghum crop, from its origin, to its domestication, and going on to biotechnology of the crop. It describes sorghum production, ideotypes, botany, physiology, abiotic and biotic factors affecting crop productivity, methods of cultivation, postharvest management, grain quality analysis for food processing, improvement of sorghum crop, and research advancements in breeding and biotechnology.

290 pages with index. 8 color illustrations. HB ISBN: 978-1-77188-967-4

eBook ISBN: 9781003127628, \$149.95 US / £116.00. July 2021



ADVANCES IN MAIZE SCIENCE

Botany, Production, and Crop Improvement

Ratikanta Maiti, and Humberto González Rodríguez,
Autonomous University of Nuevo León, Mexico

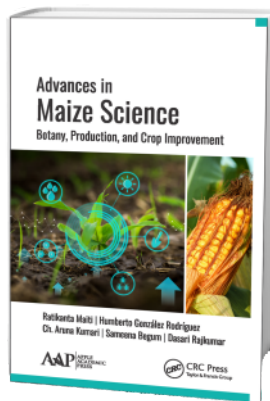
With Ch. Aruna Kumari, PhD,
Sameena Begum, Dasari Rajkumar

Offers a multi-pronged perspective on maize science, bringing together important recent research advances from several disciplines. It covers the background of maize, its origin and domestication, ideotypes, botany, taxonomy, physiology of crop growth, methods of cultivation, production, nutritional functions, biotic and abiotic stress impacts, postharvest management and technology, maize grain quality, and advances in breeding and biotechnology, filling a gap in the literature of maize.

292 pages with index. 15 color and 5 b/w illustrations.

HB ISBN: 978-1-77188-952-0, eBook ISBN: 9781003104995

\$189.95 US / £147.00. September 2021



AERIAL ROBOTICS IN AGRICULTURE

Parafoils, Blimps, Aerostats, and Kites

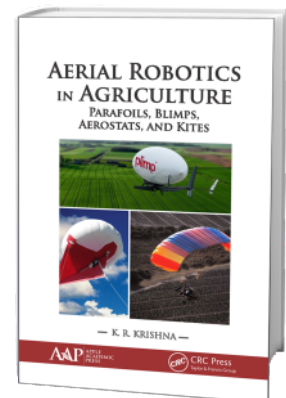
K. R. Krishna, University of Florida

A plethora of information on aerial vehicles and their possible roles in revolutionizing agricultural procedures through spectral analysis of terrains, soils, crops, water resources, diseases, floods, drought, and farm activities. The volume focuses on aerial vehicles such as the parafoils, blimps, aerostats, and kites and how they are being evaluated for use in experimental farms and fields.

414 pages with index. 61 b/w illustrations.

HB ISBN: 978-1-77188-926-1, eBook ISBN: 9781003054863,

\$189.95 US / £147.00. April 2021



ADVANCES IN RICE SCIENCE

Botany, Production, and Crop Improvement

Ratikanta Maiti, Autonomous University of Nuevo León, Mexico

Narayana Chandra Sarkar, Institute of Agriculture, West Bengal, India

With Humberto González Rodríguez, Aruna Kumari and Sameena Begum

Provides a concise overview of rice, covering the background and importance of rice; origin, evolution, and domestication of rice; and the world rice production along with important recent research advances on many different aspects of rice science and production. The authors look at advances in rice ideotypes, abiotic stress management techniques, biotic stress affecting crop productivity, new methods and technology for cultivation, and new methods and techniques in rice grain quality analysis and processing. It also describes new rice varieties, new hybrid rice technology, and new breeding methods for rice.

364 pages with index. 37 color illustrations. HB ISBN: 978-1-77188-854-7.

eBook ISBN: 9780429325113, \$169.95 US / £131.00. November 2020

For complete contents, prices, and more information,
click on the book cover or title.

AAP APPLE
ACADEMIC
PRESS

US office: 1265 Goldenrod Circle NE,
Palm Bay, FL 32905
Tel: 732-998-5302 / Fax: 866-222-9549
Email: info@appleacademicpress.com

Canadian office: 4164 Lakeshore Road
Burlington, ON L7L 1A4 Canada
Tel: 289-937-6300, Fax: 866-222-9549
Email: info@AppleAcademicPress.com

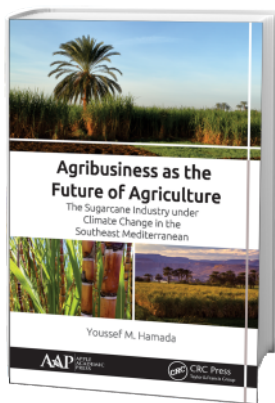
AGRIBUSINESS AS THE FUTURE OF AGRICULTURE

The Sugarcane Industry under Climate Change in the Southeast Mediterranean

Youssef M. Hamada, Agricultural Research Center, Egypt

Reviews the challenges of agribusiness from climate change in the Southeast Mediterranean sea. The author focuses on sugarcane cultivation in Egypt to illustrate the impact of climate change on agribusiness. It examines the causes and effects of climate change on agribusiness in the Southeast Mediterranean region, such as its effect on prosperity and net farm incomes crop yields. It considers how to promote agribusiness development in the area and the potential to alleviate poverty in rural areas.

326 pages with index. 19 color and 25 b/w illustrations.
HB ISBN: 978-1-77188-842-4, eBook ISBN: 9780429321702
\$169.95 US / £131.00. September 2020



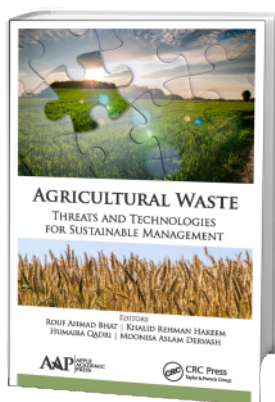
AGRICULTURAL WASTE

Threats and Technologies for Sustainable Management

Editors: Rouf Ahmad Bhat, Cluster University Srinagar, Jammu and Kashmir, India
Khalid Rehman Hakeem, King Abdulaziz University, Saudi Arabia
With Humaira Qadri, and Moonisa Aslam Dervash

Focuses on tackling the harmful impact of agricultural waste with the use of sustainable practices, bio-techniques, and new technologies that either make use of the waste as a raw material or convert the waste into a useful resource that can help achieve environmental sustainability. It investigates the sources and impacts of agri-waste on the environment and goes on to offer effective techniques, processes, and sustainable practices that can be implemented for effective agricultural waste management.

382 pages with index. 16 color and 9 b/w illustrations.
HB ISBN: 978-1-77188-963-6, eBook ISBN: 9781003105046
\$179.95 US / £139.00. July 2021



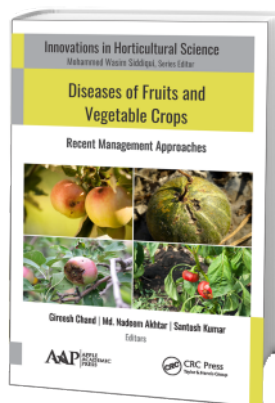
DISEASES OF FRUITS AND VEGETABLE CROPS

Recent Management Approaches

Editors: Gireesh Chand, PhD, Md. Nadeem Akhtar, PhD, Bihar Agricultural University, India, with Santosh Kumar

Covers certain basic aspects of knowledge on diagnostic symptoms, modes of perpetuation and dissemination of pathogens, favorable conditions for disease development, and the latest management strategies for disease prevention and mitigation in vegetable crops, fruit crops, and plantation crops. It covers many vegetable and fruit crops, including pineapples, grapes, apples, guava, litchi, potatoes, peas, beans, ginger and turmeric, and many more. Each chapter reviews the specific diseases relevant to the crop and their management and includes recent research findings.

548 pages with index. 48 b/w illustrations. HB ISBN: 978-1-77188-836-3
eBook ISBN: 978042932218, \$169.95 US / £131.00. September 2020



DISEASES OF FIELD CROPS

Diagnosis and Management, 2-Volume Set:

Volume 1: Cereals, Small Millets, and Fiber Crops
Volume 2: Pulses, Oil Seeds, Narcotics, and Sugar Crops

Editors: J. N. Srivastava, Bihar Agricultural University, India
A. K. Singh, University of Agricultural Sciences and Technology, India

This 2-volume set helps to fill the need for research on plant diseases, their effects, how they spread, and effective management measures to mitigate their harmful effects. It showcases recent advances in molecular plant pathology and discuss appropriate diagnostic techniques for identification of causal agents and diseases, providing the information necessary to establish management strategies. The chapters in these two volumes include detailed description of symptoms, causal organisms, disease cycles, epidemiology, and management techniques of economically important diseases. The volumes explore existing strategies and offer new methods that can be used in an integrated manner and with a comprehensive approach for the management of major diseases of the field crops. Also taken into consideration is the impact of global climate change on the spread and severity of plant diseases.

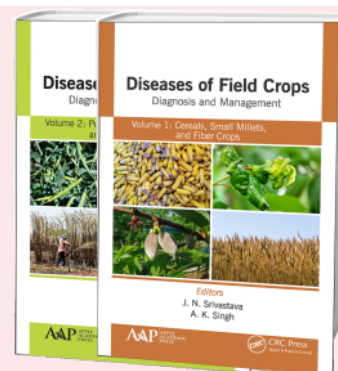
2-volume set:
880 pages with index. 22 color and 133 b/w illustrations.
HB ISBN: 978-1-77188-841-7 eBook ISBN: 9780429321771
\$339.95 US / £262.00. October 2020

Volume 1: Cereals, Small Millets, and Fiber Crops

440 pages with index. 13 color and 90 b/w illustrations.
HB ISBN: 978-1-77188-839-4, 9780429321849
\$169.95 US / £131.00. October 2020

Volume 2: Pulses, Oil Seeds, Narcotics, and Sugar Crops

400 pages with index. 14 color and 48 b/w illustrations.
HB ISBN: 978-1-77188-840-0, eBook ISBN: 9780429321962
\$169.95 US / £131.00. October 2020



FERTIGATION TECHNOLOGIES FOR MICRO IRRIGATED CROPS

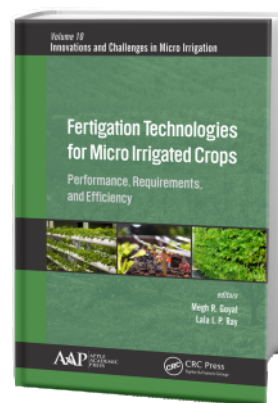
Performance, Requirements, and Efficiency

Editors: Megh R. Goyal, University of Puerto Rico

Lala I. P. Ray, Central Agricultural University—Imphal, India

Addresses the global water crisis by presenting new ways to use irrigation water judiciously through innovative fertigation management. It looks at the research and review works done throughout the world on micro irrigation and the techno-economic feasibility of various fertigation irrigation water management systems. Taking a multidisciplinary perspective, the chapters look at using fertigation to increase the effectiveness of irrigation systems, crop performance evaluation of various crops under fertigation and irrigation methods, estimating levels of crop requirements, scheduling of fertigation and irrigation, new fertigation equipment and technology, cost components of the various irrigation and fertigation systems

340 pages with index. 8 color and 130 b/w illustrations.
HB ISBN: 978-1-77188-943-8, eBook ISBN: 9781003084136
\$189.95 US / £147.00. June 2021





DISEASES OF HORTICULTURAL CROPS

Diagnosis and Management, 4-volume set:

Volume 1: Fruit Crops

Volume 2: Vegetable Crops

Volume 3: Ornamental and Spice Crops

Volume 4: Important Plantation Crops, Medicinal Crops, and Mushrooms

Editors: J. N. Srivastava, Bihar Agricultural University, India
A. K. Singh, Sher-e-Kashmir University of Agricultural Sciences and
Technology, India

The volumes provide an abundance of information for understanding and managing plant diseases that cause serious threats to the successful cultivation of horticultural crops resulting in huge losses in their yields, with emphasis on diagnostic techniques and effective management solutions to the problems of field crop plants caused by phytopathogens. It provides the information on the diagnostic tools necessary and management techniques for the various crop types. The chapters cover key diseases, typical symptoms, and management strategies. The volumes also include photographs that show symptoms of important diseases, which are helpful in disease diagnosis.

4-volume set:

Approx. 1659 pages with index. 38 color and 266 b/w illustrations.

HB ISBN: 978-1-77188-988-9, eBook ISBN: 9781003160519

\$700.00. US, £539, November 2021

Volume 1: Fruit Crops

Approx. 442 pages with index. 10 color and 46 b/w illustrations.

HB ISBN: 978-1-77188-989-6, eBook ISBN: 9781003160397

\$179.95 US / £139.00. November 2021

Volume 2: Vegetable Crops

Approx. 562 pages with index. 8 color and 189 b/w illustrations.

HB ISBN: 978-1-77188-990-2, eBook ISBN: 9781003160427

\$179.95 US / £139.00. November 2021

Volume 3: Ornamental Plants and Spice Crops

Approx. 341 pages with index. 10 color and 4 b/w illustrations.

HB ISBN: 978-1-77188-991-9, eBook ISBN: 9781003160465

\$179.95 US / £139.00. November 2021

Volume 4: Important Plantation Crops, Medicinal Crops, and Mushrooms

Approx. 314 pages with index. 10 color and 27 b/w illustrations.

HB ISBN: 978-1-77188-992-6, eBook ISBN: 9781003160472

\$179.95 US / £139.00. April 2022

FIELD PRACTICES FOR WASTEWATER USE IN AGRICULTURE

Future Trends and Use of Biological Systems

Editors: Vinod K. Tripathi, Banaras Hindu University, India

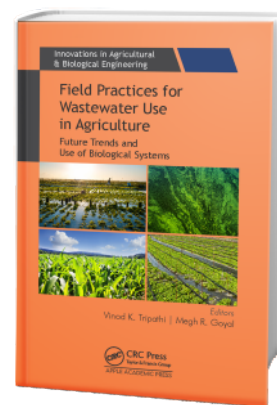
Megh R. Goyal, University of Puerto Rico

Discusses the growing importance of wastewater application in the field of agriculture. Addressing the tremendous need for the irrigation sector to reduce the demand for freshwater in agriculture, this volume looks at wastewater as a source for agricultural irrigation. The volume is divided into four sections: current and emerging issues in wastewater use in agriculture, wastewater management with biological systems, effective field practices for wastewater use, and case studies that provide information on scientific analytical studies on the environment under the influence of wastewater quality from different pollution sources.

368 pages with index. 36 color and 34 b/w illustrations.

HB ISBN: 978-1-77188-908-7, eBook ISBN: 9781003034506

\$179.95 US / £139.00. March 2021



INTERNET OF THINGS FOR AGRICULTURE 4.0

Impact and Challenges

Editors: Rajesh Singh, and Amit Kumar Thakur, PhD, Lovely Professional University, India
with Anita Gehlot, and Ajay Kumar Kaviti

An insightful look at the varied and exciting uses and applications of Wi-Fi and the Internet of Things in agriculture. With internet-enabled communications becoming more widely available, farms and agricultural establishments can take advantage of these new technologies for a wide range of farm operations, such as crop management, farm vehicle tracking, livestock monitoring, storage monitoring, and more. The collected data from these devices can be stored in the cloud system or server and accessed by the farmers via the internet or mobile phones. This book shows the many benefits to farmers from applying IoT, including better utilizing information for monitoring crops, optimizing water use, planning effective fertilization strategies, and saving time and reducing the operation expenses.

296 pages with index. 12 color and 125 b/w illustrations.

HB ISBN: 978-1-77463-002-0. eBook ISBN: 9781003161097,

\$169.95 US / £131.00.

February 2022



For complete contents, prices, and more information, click on the book cover or title.



INNOVATIVE APPROACHES IN DIAGNOSIS AND MANAGEMENT OF CROP DISEASES, 3-volume set:

Volume 1: The Mollicutes

Volume 2: Field and Horticultural Crops

Volume 3: Nanomolecules and Biocontrol Agents

Editors: R. K. Singh, and Gopala, College of Agriculture, India

Provides an abundance of new research and information on major diseases of various crops along with new techniques and technology for the detection of plant pathogens along with appropriate management strategies. Divided into three volumes and with chapters written by renowned and expert scientists working in different areas of plant pathology, the volumes cover important diseases of crops, incited by bacteria, fungi, viruses, viroids, phytoplasma, and nematodes. They address these disease challenges to commercial field and horticultural crops and their management.

3-volume set:

1174 pages with index. 42 color and 5 b/w illustrations. illustrations. HB ISBN: -027-3, eBook ISBN: 9781003187875, \$500.00. US, £385.00. September 2021

Volume 1: The Mollicutes

304 pages with index. 7 color and 2 b/w illustrations. HB ISBN: -024-2 eBook ISBN: 9781003187608, \$169.95 US / £131.00. September 2021

Volume 2: Field and Horticultural Crops

476 pages with index. 18 color illustrations. HB ISBN: -025-9 eBook ISBN: 9781003187837, \$169.95 US / £131.00. September 2021

Volume 3: Nanomolecules and Biocontrol Agents

394 pages with index. 17 color and 3 b/w illustrations. HB ISBN: -026-6, eBook ISBN: 9781003187844 \$169.95 US / £131.00. September 2021

SENSOR-BASED QUALITY ASSESSMENT SYSTEMS FOR FRUITS AND VEGETABLES

Editors: Bambang Kuswandi, PhD, University of Jember, Indonesia
Mohammed Wasim Siddiqui, PhD, Bihar Agricultural University, Sabour, India

Provides an abundance of valuable information on different sensing techniques for fruits and vegetables. It covers emerging technologies, such as NMR, MRI, wireless sensor networks (WSN), and radio-frequency identification (RFID) and their potential for industrial applications. It gives an inclusive review of the developments of sensors for quality analysis and inspection of fresh fruits and vegetables; covers advanced sensing technologies, including computer vision, spectroscopy, X-rays, magnetic resonance, mechanical contact, wireless sensor networks, and radio-frequency identification sensors; reviews the significant progress in the sensor development of noninvasive techniques for quality assessment of fruits and vegetables.

324pp pages with index. 15 color and 28 b/w illustrations. HB ISBN: 978-1-77188-935-3, eBook ISBN: 9781003084174 \$179.95 US / £139.00. December 2020

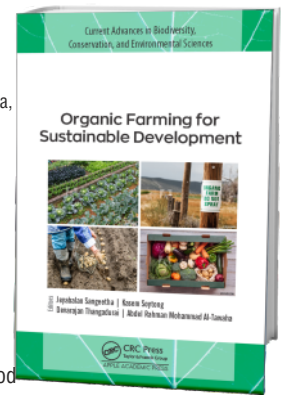
ORGANIC FARMING FOR SUSTAINABLE DEVELOPMENT

Editors: Jeyabalan Sangeetha, Central University of Kerala, South India

Kasem Soyong, King Mongkut's Institute of Technology Ladkrabang, Thailand
with Devarajan Thangadurai and Abdel Rahman Mohammad Al-Tawaha

Focuses on sustainable development in farming, primarily detailing the application of different natural resources as manure for organic farming. The authors discuss efficient and cost-effective uses of natural and available resources to produce healthy food while at the same time helping to conserve the environment.

301 pages with index. 7 color and 35 b/w illustrations. HB ISBN: 978-1-77491-020-7/ eBook ISBN: 9781003284055 \$169.95 US / £131.00. August 2022.



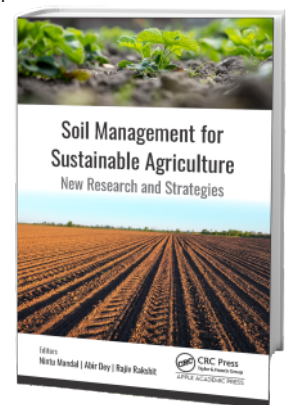
SOIL MANAGEMENT FOR SUSTAINABLE AGRICULTURE

New Research and Strategies

Editors: Nintu Mandal, Bihar Agricultural University, India
Abir Dey, ICAR-IARI, India
with Rajiv Rakshit

Explores soil management techniques and the latest improvements in soil management. Taking a sustainable approach, the volume begins with an overview of the elementary concepts of soil management and then delves into new research and novel soil management tools and techniques. Covers how clays as a critical component in sustainable agriculture, potential utilization of microbes to mitigate crop stress, resource conservation technologies and prospective carbon management strategies, use of smart tools for monitoring soils, nutrient management approaches, nanotechnological interventions for soil management, techniques for the remediation of soils contaminated by metals and pesticides.

570 pages with index. 17 color and 55 b/w illustrations. HB ISBN: 978-1-77463-023-5 / eBook ISBN: 9781003184881 \$189.95 US / £147.00. July 2022.



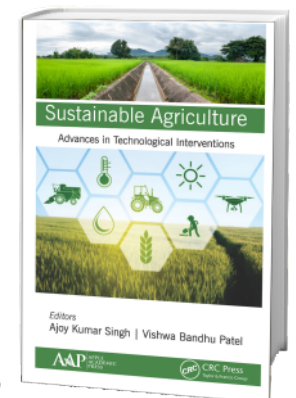
SUSTAINABLE AGRICULTURE

Advances in Technological Interventions

Editors: Ajoy Kumar Singh, Bihar Agricultural University, India
Vishwa Bandhu Patel, Indian Council of Agricultural Research–Indian Agricultural Research Institute

Looks at the evolution and challenges of sustainable agriculture and the sustainable management of agricultural crops, focusing on eco-friendly approaches, such as the utilization of waste materials. It discusses the important ideas, practices, and policies that are essential to an effective sustainable agriculture strategy. The book features 25 chapters written by experts in related fields, including crop improvement, natural resource management, crop protection, social sciences, and product development.

580 pages with index. 9 color and 72 b/w illustrations. HB ISBN: 978-1-77188-853-0 9780429325830, \$189.95 US / £147.00. September 2020



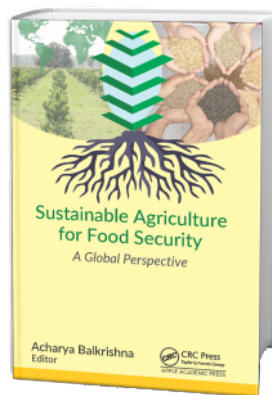
SUSTAINABLE AGRICULTURE FOR FOOD SECURITY

A Global Perspective

Editor: Acharya Balkrishna,
Patanjali University, India

Takes an analytical approach to issues related to current agricultural practices. It looks at global geographical data and key statistical reports to aid readers in comparing, understanding, and making agricultural decisions. Each chapter deals with a specific problem and its solutions, keeping in mind the context of geographical variations. It provides a historical overview of the socioeconomic importance of agriculture around the world along with discussion on threats and opportunities in the agricultural sector. It goes on to explore the importance of water sources for agriculture, including rain-fed agriculture practices, water harvesting techniques, sustainable irrigation practices, and irrigation water management. It examines postharvest management practices used in different geographical areas along with analysis on the role of technology and obstacles in implementation. It also outlines the situational analysis of food adulteration as well as norms and regulations of food security at the international level. Lastly, the concept of biofortification is explained along with methods and strategies of biofortified food production. The impact of biofortification over socioeconomic development of a specific country is also analyzed.

406 pages with index. 65 b/w illustrations. HB ISBN: -756-2
eBook ISBN: 9781003242543, \$169.95 £131.00. October 2021



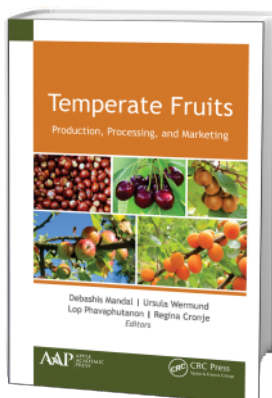
TEMPERATE FRUITS

Production, Processing, and Marketing

Editors: Debashis Mandal, Mizoram University, Aizawl, India
Ursula Wermund, Greenyard Fresh Trade International, Germany
with Lop Phavaphutanon, Regina Cronje

Presents the latest pomological research on the production, postharvest handling, processing and storage, and information on marketing for a selection of temperate fruits. These include apple, pear, quince, peach, plum, sweet cherry, kiwifruit, strawberry, mulberry, and chestnut. It provides the latest information on the effect of climate change on fruit production, organic fruit growing and advanced fruit breeding, the nutraceutical value and bioactive compounds in fruits and their role in human health, and new and advanced methods of fruit production. Topics include microirrigation, sustainable nutrient management, crop protection and plant health management, and farm mechanization.

594 pages with index. 9 color and 81 b/w illustrations.
HB ISBN: 978-1-77188-919-3, eBook ISBN: 9781003045861
\$189.95 US / £147.00. March 2021



FORTHCOMING IN 2022

Biocontrol Systems and Plant Physiology in Modern Agriculture: Processes, Strategies, Innovations

Editors: Romeo Rojas, Guillermo Cristian Guadalupe Martínez Ávila, Juan Antonio Vidales Contreras, and Cristóbal N. Aguilar
Approx. 388 pages with index. 12 color and 21 b/w illustrations
HB ISBN: 978-1-77463-978-8 / eBook ISBN: 9781003277118
\$179.95 US / £139.00. Forthcoming May 2022

Bioremediation and Phytoremediation Technologies in Sustainable Soil Management, 4-volume set:

Volume 1: Fundamental Aspects and Contaminated Sites

Volume 2: Microbial Approaches and Recent Trends

Volume 3: Inventive Techniques, Research Methods, and Case Studies

Volume 4: Degradation of Pesticides and Polychlorinated Biphenyls

Editors: Junaid Ahmad Malik, Megh R. Goyal, and Khursheed Ahmad Wani
Approx. 1670 pages with index. 44 color and 90 b/w illustrations
HB ISBN: 978-1-77463-720-3 / eBook ISBN: 9781003281337
\$650.00 US / £500.00 UK. Forthcoming July 2022

Diverse Applications of Nanotechnology in the Biological Sciences: An Essential Tool in Agri-Business and Health Care Systems

Editors: Khalid Rehman Hakeem, Majid Kamli, Jamal Sabir, and Hesham F. Alharby
Approx. 422 pages with index. 13 color and 5 b/w illustrations
HB ISBN: 978-1-77463-840-8 / eBook ISBN: 9781003277255
\$169.95 US / £131.00 Forthcoming July 2022

Integrated Pest Management in Diverse Cropping Systems

Editor: Devendra Pal Singh
Approx. 644 pages with index. 15 color and 81 b/w illustrations
HB ISBN: 978-1-77491-116-7. \$199.95 US / £154.00. Forthcoming September 2022

Integrated Waste Management Approaches for Food and Agricultural Byproducts

Editors: Tawheed Amin, Omar Bashir, Shakeel Ahmad Bhat, and Muneeb Ahmad Malik
Approx. 237 pages with index. 9 color and 16 b/w illustrations
HB ISBN: 978-1-77491-016-0 / eBook ISBN: 9781003282327
\$159.95 US / £124.00. Forthcoming June 2022

Nanotechnology Applications in Agricultural and Bioprocess Engineering: Farm to Table

Editors: Megh R. Goyal, Santosh K. Mishra, and Lohith Kumar Dasarahalli-Huligowda
308 pages with index. 11 color and 13 b/w illustrations
HB ISBN: 978-1-77463-750-0 / eBook ISBN: 9781003277439
\$159.95 US / £124.00. Forthcoming July 2022

Organic Crop Production Management

Editors: D. P. Singh, H. G. Prakash, M. Swapna, and S. Solomon
Approx. 431 pages with index. 15 color and 59 b/w illustrations
HB ISBN: 978-1-77491-058-0 / eBook ISBN: 9781003283560
\$169.95 US / £131.00. Forthcoming August 2022

Organic Farming for Sustainable Development

Editors: Jeyabalan Sangeetha, Kasem Soyong, Devarajan Thangadurai, and Abdel Rahman Mohammad Al-Tawaha
Approx. 301 pages with index. 7 color and 35 b/w illustrations
HB ISBN: 978-1-77491-020-7 / eBook ISBN: 9781003284055
\$169.95 US / £131.00. Forthcoming June 2022

Quality Control in Fruit and Vegetable Processing: Methods and Strategies

Editors: Megh R. Goyal, and Faizan Ahmad
Approx. 408 pages with index. 13 color and 3 b/w illustrations
HB ISBN: 978-1-77491-118-1. \$169.95 US / £131.00 Forthcoming September 2022

Tropical and Subtropical Fruit Crops: Production, Processing, and Marketing

Editors: Debashis Mandal, Ursula Wermund, Lop Phavaphutanon, and Regina Cronje
Approx. 643 pages with index. 18 color and 83 b/w illustrations
HB ISBN: 978-1-77491-110-5. \$219.95 US / £170.00 Forthcoming September 2022

For complete contents, prices, and more information, click on the book cover or title.

ANIMAL SCIENCE

BIOTECHNOLOGIES APPLIED TO ANIMAL REPRODUCTION

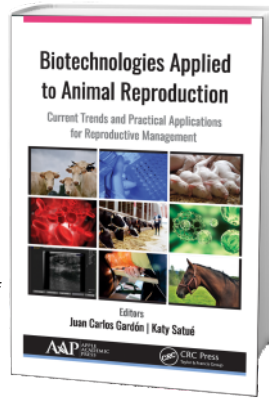
Current Trends and Practical Applications for Reproductive Management

Editors: Juan Carlos Gardón, Catholic University of Valencia San Vicente Mártir Valencia, Spain
Katy Satué, CEU-Cardinal Herrera University, Spain

“Provides the reader with the most recent information on the practical application of a series of advanced reproductive technologies in the major farm animal species, such as cattle, pigs, and horses, with emphasis on female and male cattle. The readership will appreciate the detailed description of the technologies, their critical appraisal, the extensive reference lists and the rich illustration of the book.”—From the Foreword

This comprehensive volume focuses on recent trends and new technologies used in the management of reproduction in major farm animals, focusing on both males and females of bovine, equine, and porcine species. With chapters written by scientists who specialize in their respective topics, the volume presents a selection of different technologies that have been developed to assure reproductive success by improving reproductive efficiency, generating germplasm banks, and maintaining genetic diversity in cattle, horses, and pigs.

354 pages with index 19 color and 15 b/w illustrations
HB ISBN: 978-1-77188-871-4, eBook ISBN: 9780367817527
\$169.95 US £131.00, November 2020



ARCHITECTURE

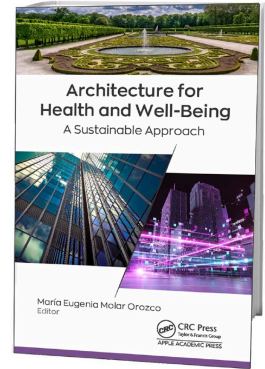
ARCHITECTURE FOR HEALTH AND WELL-BEING

A Sustainable Approach

Editor: María Eugenia Molar Orozco,
Autonomous University of Coahuila, México

Explores the importance of architecture designed for the well-being of users. It provides a unique perspective on architecture that promotes the welfare and security of those using the space, which has proved especially important during the recent COVID-19 pandemic wherein many people were confined indoors. Each chapter in the volume explains from a different angle a topic that takes into consideration how to provide benefit to human beings to achieve a better quality of life within constructions.

Approx. 378 pages with index. 194 b/w illustrations
HB ISBN: 978-1-77491-012-2 / eBook ISBN: 9781003282402
\$159.95 US / £124.00. Forthcoming June 2022



For complete contents, prices, and more information, click on the book cover or title.

BIOMEDICAL ENGINEERING & BIOTECHNOLOGY

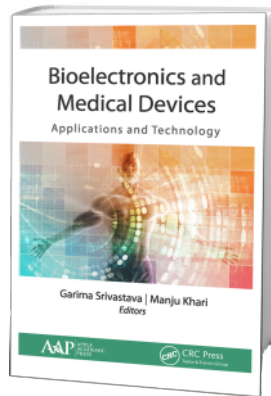
BIOELECTRONICS AND MEDICAL DEVICES

Applications and Technology

Editors: Garima Srivastava and Manju Khari, Ambedkar Institute of Advanced Communication Technologies and Research, India

Provides an abundance of information on new applications being used today for biomedical applications, covering a wide range of concepts and technologies used in biomedical applications and discussing such modern technological methods as IoT, e-pills, biomedical sensors, support vector machines, wireless devices, image and signal processing in e-health, and machine learning. It also discusses the different types of antennas, including antennas using RF energy harvesting for biomedical applications.

254 pages with index. 8 color and 115 b/w illustrations.
HB ISBN: 978-1-77188-923-0 / eBook ISBN: 9781003054405
\$179.95 US / £139.00. December 2021.



BIORESOURCE UTILIZATION AND MANAGEMENT

Applications in Therapeutics, Biofuels, Agriculture, and Environmental Science

Editors: Hrudayanath Thatoi, North Orissa University, India
Swagat Kumar Das, Biju Patnaik University of Technology, India
With Sonali Mohapatra

Throws light on new and recent research on and development of effective strategies for sustainable utilization of bioresources using modern tools and techniques to help meet this challenge, covering utilization of bioresources in therapeutics, in biofuel, in agriculture, and in environmental protection.

574 pages with index. 10 color and 69 b/w illustrations.
HB ISBN: 978-1-77188-933-9 / eBook ISBN: 9781003057826
\$189.95 US / £147.00. October 2021.

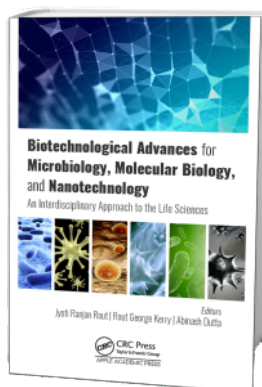
BIOTECHNOLOGICAL ADVANCES FOR MICROBIOLOGY, MOLECULAR BIOLOGY, AND NANOTECHNOLOGY

An Interdisciplinary Approach to the Life Sciences

Editors: Jyoti Ranjan Rout, AIPH University, Bhubaneswar, Odisha, India
Rout George Kerry, Utkal University, Odisha, India
With Abinash Dutta

Presents cutting-edge research on the beneficial implications of biotechnology on human welfare, focusing on microbiology, molecular biology, and nanotechnology. The book provides a detailed overview of the beneficial roles of microbes and nanotechnology-based engineered particles in biological developments.

688 pages with index. 17 color and 53 b/w illustrations.
HB ISBN: 978-1-77188-999-5 / eBook ISBN: 9781003161158
\$219.95 US / £170.00. May 2022.



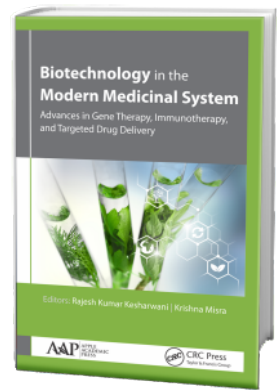
BIOTECHNOLOGY IN THE MODERN MEDICINAL SYSTEM

Advances in Gene Therapy, Immunotherapy, and Targeted Drug Delivery

Editors: Rajesh K. Kesharwani, Nehru Gram Bharati (Deemed to be University), India
Krishna Misra, Indian Institute of Information Technology

An informative picture of the state-of-the-art research in medical biotechnology involving gene therapy, immunotherapy, and targeted drug delivery systems. It discusses targeted drug delivery and alternative routes of drug targeting for health issues such as neurodegenerative disorders, cancer, malaria, and hemoglobin disorders. Also looks at the role of genes in genetic diseases and gene therapy, and immunogene therapy as alternative approaches to conventional cancer therapy.

260 pages with index. 14 color and 55 b/w illustrations.
HB ISBN: 978-1-77188-972-8 / eBook ISBN: 9781003129783
\$169.95 US / £131.00. December 2021.



DEEP LEARNING AND IOT IN HEALTHCARE SYSTEMS

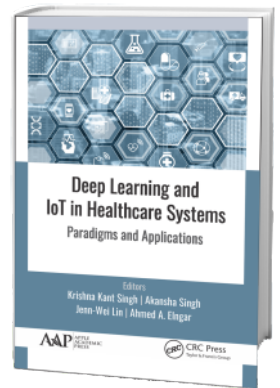
Paradigms and Applications

Editors: Krishna Kant Sing, KIET Group of Institutions, Ghaziabad, India
Akansha Singh, Amity University, Noida, India

With Jenn-Wei Lin, and Ahmed A. Elngar

Discusses the applications and challenges of deep learning and IoT for applications in healthcare. It discusses deep feedforward networks, regularization, optimization algorithms, convolutional networks, sequence modeling, and practical methodology. Chapters look at assistive devices in healthcare, alerting and detection devices, energy efficiency in using IoT, data mining for gathering health information for individuals with autism, IoT for mobile applications, and more.

348 pages with index. 8 color and 77 b/w illustrations.
HB ISBN: 978-1-77188-932-2 / eBook ISBN: 9781003055082
\$189.95 US / £147.00. December 2021.

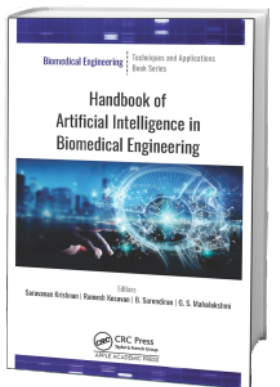


HANDBOOK OF ARTIFICIAL INTELLIGENCE IN BIOMEDICAL ENGINEERING

Editors: Saravanan Krishnan, and Ramesh Kesavan, Anna University, India

With B. Surendiran, and G. S. Mahalakshmi
Focuses on recent AI technologies and applications that provide promising solutions and enhanced technology in the biomedical field. Topics include security and privacy issues in biomedical AI systems and potential solutions, Healthcare applications using biomedical AI systems, machine learning in biomedical engineering, live patient monitoring systems, and semantic annotation of healthcare data.

564 pages with index. 6 color and 163 b/w illustrations.
HB ISBN: 978-1-77188-920-9 / eBook ISBN: 9781003045564
\$249.95 US / £193.00. March 2021.



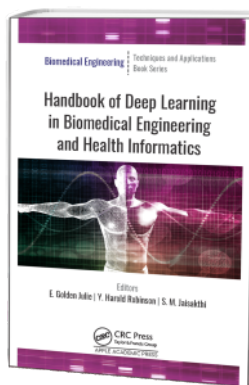
HANDBOOK OF DEEP LEARNING IN BIOMEDICAL ENGINEERING AND HEALTH INFORMATICS

Editors: E. Golden Julie, Anna University, Regional Campus, Tirunelveli, India
Y. Harold Robinson, Vellore Institute of Technology, Vellore, India

With S. M. Jaisakthi

Discusses state-of-the-art deep learning techniques and approaches that can be applied in biomedical systems and health informatics. It delves into a variety of applications, techniques, algorithms, platforms, and tools used in this area, such as image segmentation, classification, registration, and computer-aided analysis. Chapters explore deep learning algorithms, convolutional neural networks and recurrent neural network architecture, image stitching techniques, deep RNN architectures, and more.

344 pages with index. 10 color and 119 b/w illustrations.
HB ISBN: 978-1-77188-998-8 / eBook ISBN: 9781003144694
\$169.95 US / £131.00. September 2021.



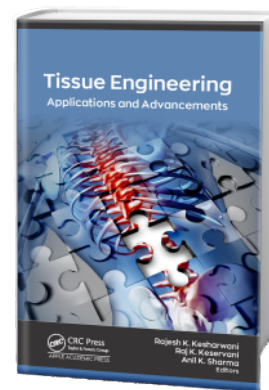
TISSUE ENGINEERING

Applications and Advancements

Editors: Rajesh K. Kesharwani, Nehru Gram Bharati (Deemed to be University), India
Raj K. Keservani, CSM Group of Institutions, India With Anil K. Sharma

Presents significant, state-of-the-art developments in tissue engineering along with its different components, specifically different types of biomaterials. It looks at the various issues involved in tissue engineering, including smart polymeric biomaterials, gene therapy, tissue engineering in reconstruction and regeneration of visceral organs, skin tissue engineering, bone and muscle regeneration, and applications in tropical medicines.

389 pages with index. 12 color and 46 b/w illustrations.
HB ISBN: 978-1-77463-020-4 / eBook ISBN: 9781003180531
\$179.95 US / £139.00. May 2022.

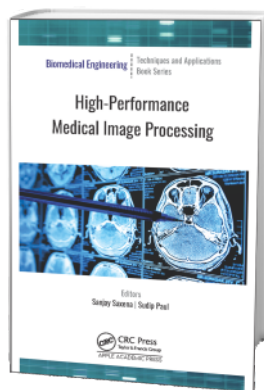


HIGH-PERFORMANCE MEDICAL IMAGE PROCESSING

Editors: Sanjay Saxena, International Institute of Information Technology, India
Sudip Paul, School of Technology at North-Eastern Hill University, India

Presents a thorough overview of medical imaging modalities, its processing, high-performance computing, and need to embed parallelism in medical image processing techniques to achieve efficient and fast results.

272 pages with index. 14 color and 128 b/w illustrations.
HB ISBN: 978-1-77463-722-7 / eBook ISBN: 9781003190011,
\$159.95 US / £124.00. July 2022.



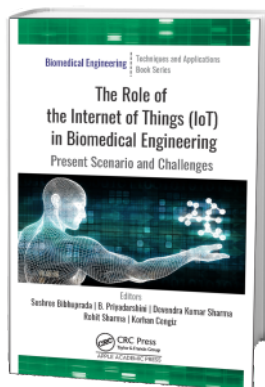
THE ROLE OF THE INTERNET OF THINGS (IoT IN BIOMEDICAL ENGINEERING

Present Scenario and Challenges

Editors: Sushree Bibhuprada B. Priyadarshini, Institute of Technical Education and Research, India
Devendra Kumar Sharma, SRM Institute of Science and Technology, India

with Rohit Sharma, and Korhan Cengiz
Introduces the key evolving applications of IoT in the medical field for patient care delivery through the usage of smart devices. It shows how IoT opens the door to a wealth of information through real-time data analysis as well as testing. It discusses IoT devices for patient health tracking, emergency issues, smart administration of patients, cardiac analysis in e-healthcare, the usage of Arduino kits, etc.

279 pages with index. 9 color and 54 b/w illustrations.
HB ISBN: 978-1-77463-012-9 / eBook ISBN: 9781003180470
\$169.95 US / £131.00. February 2022.



ALSO FORTHCOMING IN 2022

Bioethanol: Biochemistry and Biotechnological Advances

Editors: Ayerim Y. Hernández Almanza, Nagamani Balagurusamy, Héctor A. Ruiz, and Cristóbal N. Aguilar
Approx. 621 pages with index. 14 color and 67 b/w illustrations
HB ISBN: 978-1-77463-849-1 / eBook ISBN: 9781003277132
\$199.95 US / £154.00 Forthcoming August 2022

Environmental Biotechnology: Sustainable Remediation of Contamination in Different Environments

Editors: Rouf Ahmad Bhat, Moonisa Aslam Dervash, Khalid Rehman Hakeem, and Khalid Zaffar Masoodi
Approx. 355 pages with index. 12 color and 3 b/w illustrations
HB ISBN: 978-1-77463-830-9 / eBook ISBN: 9781003277279
\$159.95 US / £124.00 Forthcoming May 2022

High-Performance Medical Image Processing

Editors: Sanjay Saxena, and Sudip Paul
328 pages with index. 14 color and 127 b/w illustrations
HB ISBN: 978-1-77463-722-7 / eBook ISBN: 9781003190011
\$159.95 US / £124.00 Forthcoming June 2022

Hydrocarbon Biotechnology: Challenges and Future Trends

Editors: Wael Ahmed Ismail, and Jonathan Van Hamme
Approx. 413 pages with index. 17 color and 42 b/w illustrations
HB ISBN: 978-1-77463-989-4 / eBook ISBN: 9781003277354
\$189.95 US / £147.00 Forthcoming May 2022

Nanotechnology Applications in Agricultural and Bioprocess Engineering: Farm to Table

Editors: Megh R. Goyal, PE, Santosh K. Mishra, and Lohith Kumar Dasarahalli-Huligowda
308 pages with index. 11 color and 13 b/w illustrations
HB ISBN: 978-1-77463-750-0 / eBook ISBN: 9781003277439
\$159.95 US / £124.00 Forthcoming July 2022

Seaweed Biotechnology: Biodiversity and Biotechnology of Seaweeds and Their Applications

Editors: Jayabalan Sangeetha, and Devarajan Thangadurai
Approx. 333 pages with index. 11 color and 29 b/w illustrations
HB ISBN: 978-1-77491-090-0 / eBook ISBN: 9781003300854
\$169.95 US / £131.00 Forthcoming August 2022

The Role of the Internet of Things (IoT) in Biomedical Engineering: Present Scenario and Challenges

Editors: Sushree Bibhuprada B. Priyadarshini, Devendra Kumar Sharma, Rohit Sharma, and Korhan Cengiz
274 pages with index. 9 color and 50 b/w illustrations
HB ISBN: 978-1-77463-012-9 / eBook ISBN: 9781003180470
\$169.95 US / £131.00 Forthcoming February 2022

BIOLOGY & RELATED AREAS



ADVANCES IN INVERTEBRATE (NEURO)ENDOCRINOLOGY

A Collection of Reviews from this Post-Genomic Era

VOLUME 1: Phyla Other Than Arthropoda

VOLUME 2: Arthropoda

Saber Saleuddin, York University in Toronto, Canada

Angela B. Lange, University of Toronto Mississauga, Ontario, Canada

With Ian Orchard

Covers most of the diverse endocrine systems that exist among invertebrates.

2-VOLUME SET:

896 pages with index. 36 color and 89 b/w illustrations.

HB ISBN: 978-1-77188-809-7 / eBook ISBN: 9780429264450 \$399.95 US / £308.00. February 2020.

VOLUME 1: Phyla Other Than Arthropoda

482 pages with index. 27 color and 61 b/w illustrations.

HB ISBN: 978-1-77188-892-9 / eBook ISBN: 9781003029854 \$199.95 US / £154.00. February 2020.

VOLUME 2: Arthropoda

414 pages with index. 9 color and 28 b/w illustrations.

HB ISBN: 978-1-77188-893-6 / eBook ISBN: 9781003029861 \$199.95 US / £154.00. February 2020.

BACTERIAL BIOSURFACTANTS

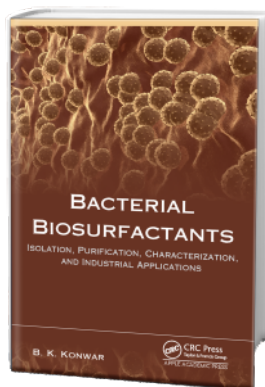
Isolation, Purification, Characterization, and Industrial Applications

B. K. Konwar, Tezpur University (Central), India

Offers comprehensive coverage of bacterial biosurfactants, the competitive new area of research that has exciting potential application in agriculture and petroleum exploration. It covers bacterial biosurfactants in nanostructure, including their comparison to synthetic surfactants, their interaction with microorganisms, their biochemistry, characterization, genetics of production, bioremediation effects, and more.

272 pages with index. 19 color and 19 b/w illustrations.

HB ISBN: 978-1-77463-056-3 / eBook ISBN: 9781003188131 \$169.95 US / £131.00. March 2022.



FORENSIC DNA ANALYSIS

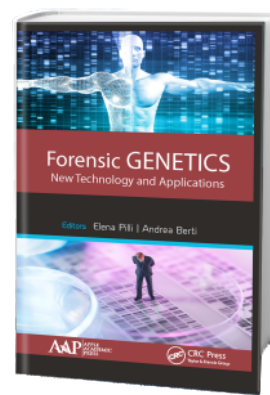
Technological Development and Innovative Applications

Editors: Elena Pilli and Andrea Berti, Forensic Scientific Centre, Italy

A fascinating overview of new technologies and applications in forensic genetics. Edited by two forensic experts with many years of forensic crime experience with the Italian police and with prestigious universities, it presents an introduction to genome polymorphisms, discusses forensic genetic markers, presents a variety of new methods and techniques in forensic genetics, and looks at a selection of new technological innovations and inventions now available from commercial vendors.

554 pages with index. 16 color and 47 b/w illustrations.

HB ISBN: 978-1-77188-905-6 / eBook ISBN: 9781003043027 \$189.95 US / £147.00. March 2021.



GATEWAY TO CONDENSED MATTER PHYSICS AND MOLECULAR BIOPHYSICS

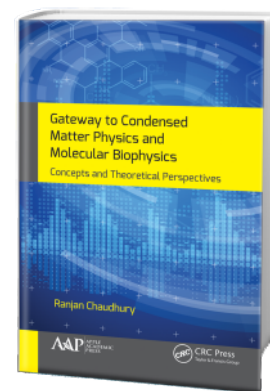
Concepts and Theoretical Perspectives

Ranjan Chaudhury, S. N. Bose National Centre for Basic Sciences, India

Provides the necessary background material and brings into focus the fundamental concepts essential for advanced research in theoretical condensed matter physics and its interface with molecular biophysics. It is the outcome of the author's long teaching and research career in theoretical condensed matter physics and related interdisciplinary fields.

458 pages with index. 7 color and 3 b/w illustrations.

HB ISBN: 978-1-77188-913-1 / eBook ISBN: 9781003057840 \$159.95 US / £124.00. December 2021.



THE GLYCOME

Understanding the Diversity and Complexity of Glycobiology

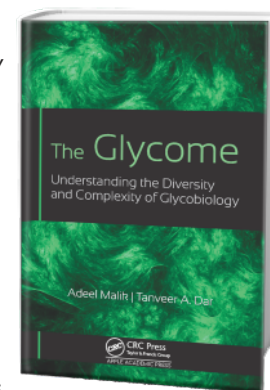
Editors: Adeel Malik, Institute of Intelligence Informatics Technology, Sangmyung University, South Korea

Tanveer A. Dar, University of Kashmir, Srinagar, India

Provides a comprehensive understanding of the enigmatic identity of the glycome, a complex but important area of research, largely ignored due to its complexity. It thoroughly deals with almost all aspects of the glycome, i.e., elucidation of the glycan identity enigma and its role in regulation of the cellular process and in disease etiology. It bridges the knowledge gap in understanding the glycome, from being a cell signature to its applications in disease etiology. In addition, it details many of the major insights regarding the possible role of the glycome in various diseases as a therapeutic marker.

336 pages with index. 12 color and 15 b/w illustrations.

HB ISBN: 978-1-77188-997-1 / eBook ISBN: 9781003145394 \$189.95 US / £147.00. July 2021.



PHYCOBIOTECHNOLOGY

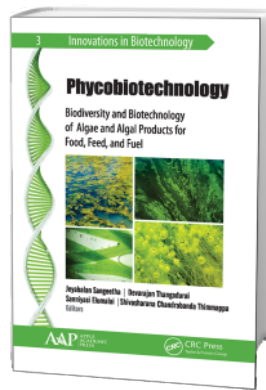
Biodiversity and Biotechnology of Algae and Algal Products for Food, Feed, and Fuel

Editors: Jeyabalan Sangeetha, Central University of Kerala at Kasaragod, South India
Devarajan Thangadurai, Karnatak University in South India
With Sanniyasi Elumalai and Shivasharana Chandrabanda Thimmapp

Named #1 of 15 Best New Biotechnology Books to Read in 2021 by BookAuthority

This volume explores and explains the vast uses and benefits of algae as food, feed, and fuel. It covers the most advanced applications of algae in the food and feed industries and for environmental sustainability.

474 pages with index. 10 color and 35 b/w illustrations.
HB ISBN: 978-1-77188-896-7 / eBook ISBN: 9781003019510
\$179.95 US / £139.00. March 2021.



CLINICAL & EXPERIMENTAL MEDICINE

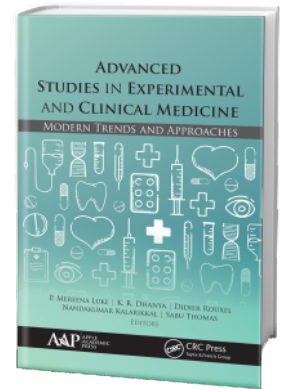
ADVANCED STUDIES IN EXPERIMENTAL AND CLINICAL MEDICINE

Modern Trends and Latest Approaches

Editors: P. Mereena Luke, Gdansk University of Technology, Poland
K. R. Dhanya, Mahatma Gandhi University, India
With Didier Rouxel, Nandakumar Kalarikkal, and Sabu Thomas

Discusses new developments in various areas of clinical medicine, including dental, surgery, and general practice. These scientific papers and chapters analyze the diagnostic processes and inform of new and novel diagnostic techniques.

310 pages with index. 8 color and 51 b/w illustrations.
HB ISBN: 978-1-77188-906-3 / eBook ISBN: 9781003057451
\$179.95 US / £139.00. March 2021.



For complete contents, prices, and more information, click on the book cover or title.

BUSINESS MANAGEMENT & HUMAN RESOURCES

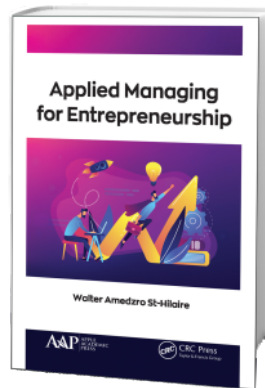
APPLIED MANAGING FOR ENTREPRENEURSHIP

Walter Amedzro St-Hilaire,
University of Ottawa, Canada

Presents the analytical and synthetic dimensions of the foundations of entrepreneurship decisions. It provides an overview of the strategies for business optimization. The author looks at the main mechanisms usually chosen by companies and the important questions they elicit from CEOs. Generic practices are discussed, which are the most frequently used the tools. Optimization in applied management is not based solely on an analysis of the business context and the resources of the organization. It focuses also on the optimization of diversified and internationalized companies. It discusses the reasons for companies to diversify their activities and the various existing optimization mechanisms. Subsequently, the book addresses the challenges associated with applied governing and the strategies that can be used in a globalized context.

288 pages with index.

HB ISBN: 978-1-77188-911-7 / eBook ISBN: 9781003034377
\$159.95 US / £124.00. September 2020.



CORPORATE SOCIAL RESPONSIBILITY (CSR) PRACTICES

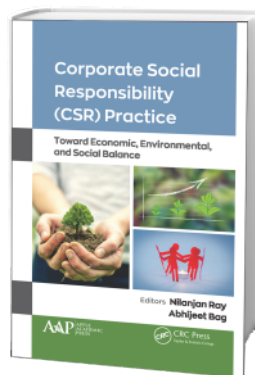
Toward Economic, Environmental, and Social Balance

Editors: Nilanjan Ray, Adamas University, West Bengal, India
Abhijeet Bag, Cooch Behar Panchanan Barma University, India

Explores the management concept whereby companies integrate social and environmental concerns in their business operations and in their interactions with their stakeholders. It discusses corporate social responsibility in conjunction with employee quality of life, globalization, industry sustainability, environmental accountability, academic spin-off, education, empowerment of women, corporate reputation, expenditures for CSR purposes, and more.

260 pages with index. 8 color and 5 b/w illustrations.

HB ISBN: 978-1-77188-975-9 / eBook ISBN: 9781003146414
\$129.95 US / £100.00. December 2021.



FINANCIAL INTELLIGENCE IN HUMAN RESOURCES MANAGEMENT

New Directions and Applications for Industry 4.0

Editors: Gurinder Singh, and Hardeep Singh Dhanny,
Amity Universities, India
with Vikas Garg, and Silky Sharma

The book looks at the adoption of current fast-moving computers and automation in the workplace and its impact on the financial aspects of human resources. It offers case studies that provide firsthand knowledge of real-life problems, solutions, and situations faced by the industry and highlight the thought process in resolution of the complex problems. Topics include HR management approaches, global HR challenges, behavioral finance for financial acumen, corporate social responsibility, women empowerment in the HR industry, emotional intelligence in the era of Industry 4.0, and more.

378 pages with index. 7 color and 34 b/w illustrations.

HB ISBN: 978-1-77188-934-6 / eBook ISBN: 9781003083870
\$179.95 US / £139.00. July 2021.



INTEGRATING NEW TECHNOLOGIES IN INTERNATIONAL BUSINESS

Opportunities and Challenges

Editors: Gurinder Singh, and Alka Maurya,
Amity Universities, India
with Richa Goel

Explores the rapid changes in technology that have affected businesses and social environments that are offering new challenges and opportunities for small to mid-size enterprises (SMEs and start-ups). It highlights how businesses in emerging economies are implementing the new technological innovations to compete in the global market. Topics include IoT and customer relationship management, cross-cultural management, artificial intelligence, social media advertising, multichannel banking, digital payment technology, blockchain technology, augmented reality, eye-tracking analysis.

374 pages with index. 10 color and 51 b/w illustrations.

HB ISBN: 978-1-77188-957-5 / eBook ISBN: 9781003130352
\$169.95 US / £131.00. March 2022.



MANAGEMENT PRACTICES FOR ENGAGING A DIVERSE WORKFORCE

Tools to Enhance Workplace Culture

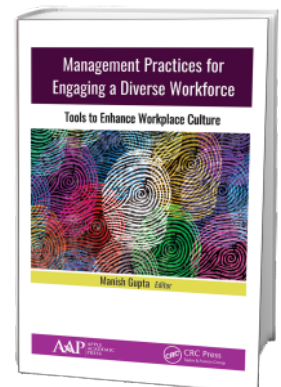
Editor: Manish Gupta, IBS Hyderabad, India

Explores the important themes of workforce diversity and culture, including differences of race, religion, gender, sexuality, income class, education level, marital status, generation/age, physical ability, and more.

376 pages with index. 6 color and 5 b/w illustrations.

HB ISBN: 978-1-77188-863-9
eBook ISBN: 9780367808419

\$159.95 US / £124.00. November 2020.



For complete contents, prices, and more information, click on the book cover or title.

RESOURCE EFFICIENCY, SUSTAINABILITY, AND GLOBALIZATION

Exploring India-European Union Cooperation

Editors: Manoranjan Mishra, and
Manoj Kumar Dash,
Khallikote University, India
With Dinoj Kumar Upadhyay, and
Raj Kishor Kampa

Takes a unique approach to exploring the efficient management of resources in the era of resource depletion due to climate changes and business expansion, in conjunction with considering the multiple dimensions of India-European Union cooperation. The book analyzes regional and global trends in the process of globalization and sustainable development, particularly in the context of natural resource management and resource efficiency. It offers a variety of perspectives through useful and current information in this field, providing a concise and holistic understanding of the issues and challenges faced when exploiting natural resources for sustainable and efficient resource utilization.

292 pages with index. 17 color and 23 b/w illustrations.
HB ISBN: 978-1-77188-959-9 / eBook ISBN: 9781003130833
\$139.95 US / £108.00. December 2021.



ALSO FORTHCOMING IN 2022

Emotional Intelligence for Leadership Effectiveness: Management Opportunities and Challenges during Times of Crisis

Editors: Mubashir Majid Baba, Chitra Krishnan, and Fatma
Nasser Al-Harthy
Approx. 261 pages with index. 9 color and 33 b/w illustrations
HB ISBN: 978-1-77491-132-7 \$149.95 US / £116.00
Forthcoming October 2022

Marketing Analytics: A Machine Learning Approach

Editors: A. Mansurali and P. Mary Jeyanthi
Approx. 304 pages with index. 12 color and 173 b/w illustrations
HB ISBN: 978-1-77491-088-7 / eBook ISBN: 9781003300632
\$159.95 US / £124.00 Forthcoming August 2022

Marketing by Contingency in the Time of COVID-19: Overcoming Business Crises and Meeting Marketing Challenges

Editors: Alicia de la Peña, and Juan Bernardo Amezcua Nunez
Approx. 250 pages with index. 10 color and 13 b/w illustrations
HB ISBN: 978-1-77491-105-1 / eBook ISBN: 9781003300694
\$149.95 US / £116.00 Forthcoming September 2022

For complete contents, prices, and more information,
click on the book cover or title.

CHEMISTRY & CHEMICAL ENGINEERING

BIOHYDROGEN

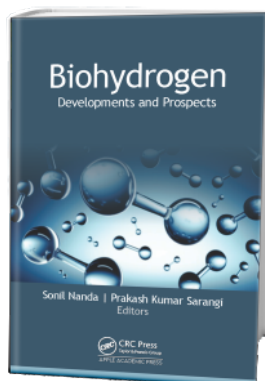
Developments and Prospects

Editors: Sonil Nanda,
University of Saskatchewan, Canada

Prakash Kumar Sarangi, Central Agricultural
University, India

Covers some the important recent advances in the production and utilization of biohydrogen and its solutions for clean fuel, waste management, waste valorization, reduced greenhouse gas emissions, and climate change mitigation.

356 pages with index. 11 color and 8 b/w illustrations. HB ISBN: 978-1-77463-980-1 / eBook ISBN: 9781003277156
\$169.95 US / £131.00. July 2022.



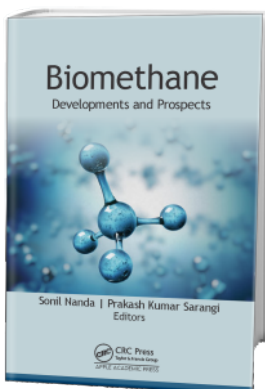
BIOMETHANE

Developments and Prospects

Editors: Sonil Nanda,
University of Saskatchewan, Canada
Prakash Kumar Sarangi, Central Agricultural
University, India

A comprehensive synopsis of the production and utilization of biomethane along with important recent advances. Covers the production of biogas (or biomethane) with emphasis on the different biomass utilization for industrial and domestic applications and describes the characteristics, parameters, and process design of anaerobic digesters for biomethane production from waste biomass. Also discusses advanced genetic engineering tools and techniques to enhance biomethanation and biomethane production.

285 pages with index. 16 color and 22 b/w illustrations. HB ISBN: 978-1-77463-982-5 / eBook ISBN: 9781003277163
\$159.95 US / £124.00. July 2022.



CHEMISTRY AND CHEMICAL ENGINEERING FOR SUSTAINABLE DEVELOPMENT

Best Practices and Research Directions

Editors: Miguel A. Esteso, University of Alcalá, Spain
Ana Cristina Faria Ribeiro, University of Coimbra, Portugal
With A. K. Haghi

Takes a technical approach that addresses using green design and analysis in chemical engineering. It brings together innovative research, new concepts, and novel developments in the application of new tools for chemical and materials engineers. It contains significant research, reporting new methodologies and important applications in the fields of chemical engineering as well as the latest coverage of chemical databases and the development of new methods and efficient approaches for chemists. Highlighting theoretical foundations, real-world cases, and future directions, the volume covers a diverse collection on the newest innovations in the field, including new research on atomic/nuclear physics, the barometric formula, amino acids in aqueous solutions, bioremediation, and biotechnology, and more.

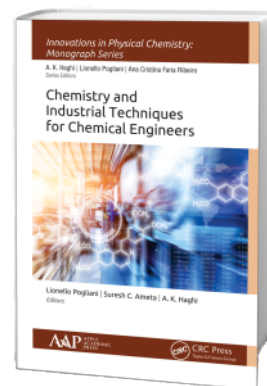
360 pages with index. 18 color and 38 b/w illustrations. HB ISBN: 978-1-77188-870-7 / eBook ISBN: 9780367815967
\$169.95 US / £131.00. November 2020.

CHEMISTRY AND INDUSTRIAL TECHNIQUES FOR CHEMICAL ENGINEERS

Editors: Lionello Pogliani,
University of Valencia-Burjassot, Spain
Suresh C. Ameta, PAHER University, India
With A. K. Haghi

Brings together innovative research, new concepts, and novel developments in the application of new tools for chemical and materials engineers. It contains significant research, reporting new methodologies, and important applications in the fields of chemical engineering as well as the latest coverage of chemical databases and the development of new methods and efficient approaches for chemists.

388 pages with index. 15 color and 84 b/w illustrations. HB ISBN: 978-1-77188-823-3 / eBook ISBN: 9780429286674
\$169.95 US / £131.00. September 2020.



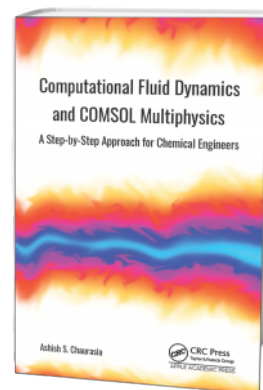
COMPUTATIONAL FLUID DYNAMICS AND COMSOL MULTIPHYSICS

A Step-by-Step Approach for Chemical Engineers

Ashish S. Chaurasia, Visvesvaraya National Institute of
Technology, India

Covers computational fluid dynamics simulation using COMSOL Multiphysics® Modeling Software to solve typical problems in chemical reactors, transport processes, fluid flow, and heat and mass transfer. The book includes over 560 snapshots to provide a step-by-step approach to using the program for computational fluid dynamics simulations.

390 pages with index. 14 color and 567 b/w illustrations. HB ISBN: 978-1-77463-008-2 / eBook ISBN: 9781003180500
\$179.95 US / £139.00. December 2021.



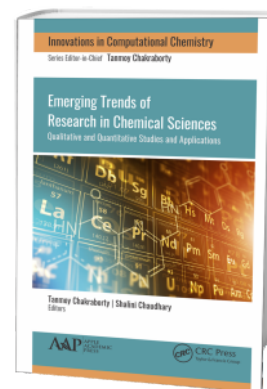
EMERGING TRENDS OF RESEARCH IN CHEMICAL SCIENCES

Qualitative and Quantitative Studies and Applications

Editors: Tanmoy Chakraborty,
Sharda University, India
Shalini Chaudhary, Alankar P. G. Girls College, India

A wealth of practical experience and research on new methodologies and applications in chemical science. It also includes presentations on small-scale new drug design related projects that have potential applications in several disciplines of chemistry and in drug development.

230 pages with index. 18 color and 99 b/w illustrations. HB ISBN: 978-1-77188-973-5 / eBook ISBN: 9781003129929
\$169.95 US / £131.00. September 2021.

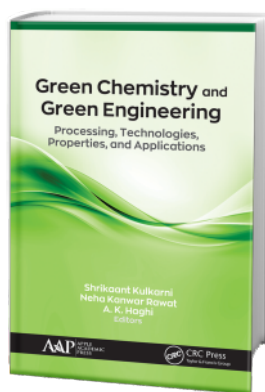


GREEN CHEMISTRY AND GREEN ENGINEERING

Processing, Technologies, Properties, and Applications

Editors: Shrikaant Kulkarni,
Vishwakarma Institute of Technology, India Neha
Kanwar Rawat, CSIR-National Aerospace Laboratories,
India
With A. K. Haghi

Presents a broad range of application-based green chemistry and engineering research on the approaches for green engineering of new processes as well as for improving the environmental risks of existing processes. Topics include solar energy, electrospinning of bio-based polymeric nanofibers, biotransformation, engineered nanomaterials in environmental protection, and much more.
322 pages with index. 9 color and 64 b/w illustrations.
HB ISBN: 978-1-77188-900-1 / eBook ISBN: 9781003057895
\$179.95 US / £139.00. December 2020.



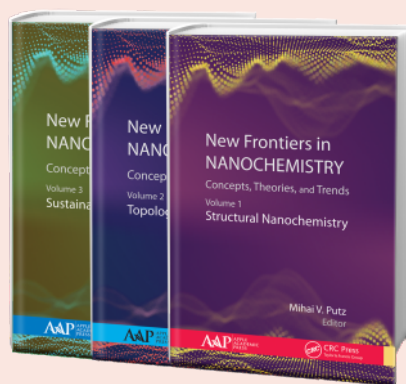
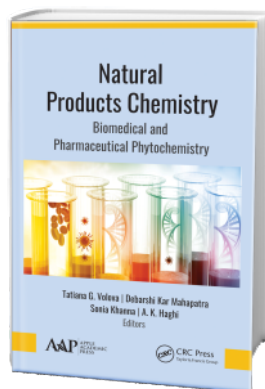
NATURAL PRODUCTS CHEMISTRY

Biomedical and Pharmaceutical Phytochemistry

Editors: Tatiana G. Volova, Siberian Federal
University, Russia
Debarshi Kar Mahapatra, Dadasaheb Balpande
College of Pharmacy, Rashtrasant Tukadoji Maharaj
Nagpur University, India

With Sonia Khanna, and A. K. Haghi
Focuses on the development of biochemical and biomedical products and their applications. It highlights the importance of accomplishing an integration of engineering with biology and medicine to understand and manage the scientific, industrial, and clinical aspects.

314 pages with index. 10 color and 52 b/w illustrations.
HB ISBN: 978-1-77188-876-9 / eBook ISBN: 9781003000693
\$169.95 US / £131.00. November 2020.



NEW FRONTIERS IN NANOCHEMISTRY

Concepts, Theories, and Trends, 3-volume set:
Volume 1: Structural Nanochemistry
Volume 2: Topological Nanochemistry
Volume 3: Sustainable Nanochemistry

Editor: Mihai V. Putz, West University of Timișoara, Romania

Focuses on structural nanochemistry, topological nanochemistry, and sustainable nanochemistry, collectively forming an explicative handbook in nanochemistry, providing a rich resource that is thorough and accessible, encompassing the core concepts of multiple areas of nanochemistry. It explores the content through a transdisciplinary lens, integrating the basic and advanced modern concepts with examples, applications, issues, tools, algorithms, and even historical notes on the important people. These volumes define and explain over 130 essential concepts in nanochemistry, each including a substantial amount of supporting material, such as examples, applications, tables, and equations.

3-VOLUME SET:

1706 pages with index. 102 color and 281 b/w illustrations.
HB ISBN: 978-1-77188-780-9 / eBook ISBN: 9780367077822
\$500 US / £385.00. May 2020.

VOLUME 1: STRUCTURAL NANOCHEMISTRY

526 pages with index. 29 color and 110 b/w illustrations.
HB ISBN: 978-1-77188-777-9 / eBook ISBN: 9780429022937
\$169.95 US £131.00.

VOLUME 2: TOPOLOGICAL NANOCHEMISTRY

606 pages with index. 46 color and 73 b/w illustrations.
HB ISBN: 978-1-77188-778-6 / eBook ISBN: 9780429022937
\$169.95 US / £131.00. May 2020.

VOLUME 3: SUSTAINABLE NANOCHEMISTRY

574 pages with index. 27 color and 98 b/w illustrations.
HB ISBN: 978-1-77188-779-3 / eBook ISBN: 9780429022951
\$169.95 US / £131.00. May 2020.

For complete contents, prices, and more information,
click on the book cover or title.

COMPUTER & INFORMATION SCIENCE / INTERNET TECHNOLOGY / ELECTRONICS COMMUNICATIONS & ENGINEERING

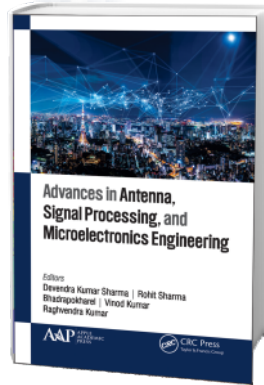
ADVANCES IN ANTENNA, SIGNAL PROCESSING, AND MICROELECTRONICS ENGINEERING

Editors: Devendra Kumar Sharma, and Rohit Sharma

SRM Institute of Science and Technology, India with Bhadra Pokharel, Vinod Kumar, and Raghvendra Kumar

Addresses the functional framework of antenna, signal processing, and microelectronics engineering and explores the concepts from the basic to advanced level.

264 pages with index. 105 b/w illustrations.
HB ISBN: 978-1-77188-883-7 / eBook ISBN: 9781003006190
\$169.95 US / £131.00. July 2021.



ADVANCES IN APPLICATIONS OF COMPUTATIONAL INTELLIGENCE AND THE INTERNET OF THINGS (IoT)

Cryptography and Network Security in IoTs

Editors: Rajdeep Chowdhury
S. K. Niranjana, JSS Science and Technology University, India

Illustrates the diversified applications of IoT. The volume addresses the issue of data safekeeping along with the development of a new cryptographic and security technology as well as a range of other advances in IoT. It looks at the application of IoT in medical technology and healthcare, including the design of IoT-based mobile healthcare units and a blockchain technique based smart health record system.

271 pages with index. 12 color and 46 b/w illustrations.
HB ISBN: 978-1-77188-969-8 / eBook ISBN: 9781003127482
\$169.95 US / £131.00. June 2022.



APPLICATIONS OF ARTIFICIAL INTELLIGENCE IN BUSINESS AND FINANCE

Modern Trends

Editors: Vikas Garg,
Amity University Uttar Pradesh, India
Shalini Aggarwal,
Chandigarh University, India
with Pooja Tiwari and Prasenjit Chatterjee

Focuses on the application of artificial intelligence in finance, business, and related areas. Topics cover the impact and application of AI on many diverse areas in finance and business, including e-commerce systems, financial services, fraud prevention, identifying loan-eligible customers, online business, Fac/ eBook social commerce, insurance industry, online marketing, and more.

272 pages with index. 8 color and 30 b/w illustrations.
HB ISBN: 978-1-77188-968-1 / eBook ISBN: 9781003129639
\$169.95 US / £131.00. December 2021



APPLICATIONS OF BLOCKCHAIN AND BIG IoT SYSTEMS

Digital Solutions for Diverse Industries

Arun Solanki, Gautam Buddha University, Greater Noida, India
Vishal Jain, Sharda University, India
With Loveleen Gaur

Presents blockchain-based solutions for big data and IoT applications. It explores a variety of advances in real-world applications in several sectors, including higher education, cybersecurity, agriculture, business and management, healthcare and biomedical science, construction and project management, smart city development, and others.

550 pages with index. 9 color and 133 b/w illustrations.
HB ISBN: 978-1-77463-745-6 / eBook ISBN: 9781003231332
\$189.95 US / £147.00. June 2022.



APPLIED SOFT COMPUTING

Techniques and Applications

Editors: Samarjeet Borah and Ranjit Panigrahi, Sikkim Memorial University, Sikkim, India

Explores a variety of modern techniques that deal with estimated models and give resolutions to complex real-life issues. It begins with the basics and goes on to explore a variety of modern applications of soft computing in areas such as approximate reasoning, artificial neural networks, Bayesian networks, big data analytics, bioinformatics, cloud computing, control systems, data mining, functional approximation, fuzzy logic, genetic and evolutionary algorithms, hybrid models, machine learning, metaheuristics, neuro fuzzy system, optimization, randomized searches, and swarm intelligence.

286 pages with index. 11 color and 78 b/w illustrations.
HB ISBN: 978-1-77463-029-7 / eBook ISBN: 9781003186885
\$169.95 US / £131.00. January 2022.



For complete contents, prices, and more information, click on the book cover or title.

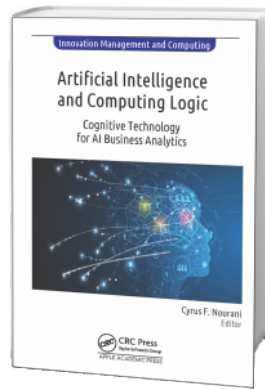
ARTIFICIAL INTELLIGENCE AND COMPUTING LOGIC

Cognitive Technology for AI Business Analytics

Editor: Cyrus F. Nourani, Entrepreneur and Independent Consultant

Focusing on the cutting-edge applications of AI cognitive computing from neuromorphic to quantum cognition as applied to AI business analytics, this new volume explores AI's importance in managing cognitive processes along with ontological modeling concepts for venturing into new business frontiers.

286 pages with index. 6 color and 17 b/w illustrations. HB ISBN: 978-1-77463-011-2 / eBook ISBN: 9781003180487 \$169.95 US / £131.00. December 2021



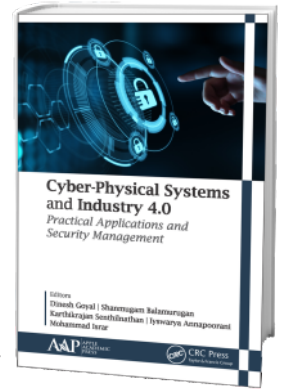
CYBER-PHYSICAL SYSTEMS AND INDUSTRY 4.0

Practical Applications and Security Management

Editors: Dinesh Goyal, Poornima Institute of Engineering and Technology, India
Shanmugam Balamurugan, QUANTS IS & CS, India

With Karthikrajan Senthilnathan, Iyswarya Annapoorani, and Mohammad Israr
Discusses the effective practical applications of cyber-physical systems, identifying the best set of applications and discussing the drawbacks of existing systems. Includes case studies and examples in healthcare, automotive electronics, industrial automation, environment monitoring, agriculture, and applications in civil and mechanical sectors

290 pages with index. 4 color and 80 b/w illustrations. HB ISBN: 978-1-77188-971-1 / eBook ISBN: 9781003129790 \$149.95 US / £116.00. February 2022.



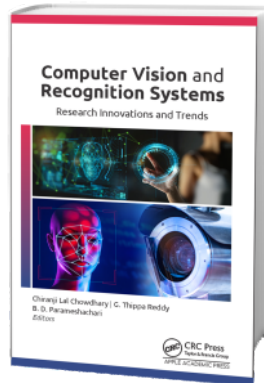
COMPUTER VISION AND RECOGNITION SYSTEMS

Research Innovations and Trends

Editors: Chiranjil Lal Chowdhary and G. Thippa Reddy, VIT University, Vellore, India

with B. D. Parameshachari, PhD
Focuses on how artificial intelligence can be used to give computers the ability to imitate human sight. It explains the essential modules that are necessary for comprehending artificial intelligence experiences to provide machines with the power of vision.

272 pages with index. 9 color and 86 b/w illustrations. HB ISBN: 978-1-77463-015-0 / eBook ISBN: 9781003180593 \$149.95 US / £116.00. March 2022.



CYBERSECURITY

Ethics, Legal, Risks, and Policies

Ishaani Priyadarshini, University of Delaware, USA
Chase Cotton, University of Delaware Center for Intelligent CyberSecurity, USA

The first of its kind to introduce the integration of ethics, laws, risks, and policies in cyberspace. This book serves as a summary of the state of the art of cyber laws in the United States and considers more than 50 cyber laws.

434 pages with index. 70 b/w illustrations. HB ISBN: 978-1-77463-022-8 / eBook ISBN: 9781003187127 \$159.95 US / £124.00. March 2022.

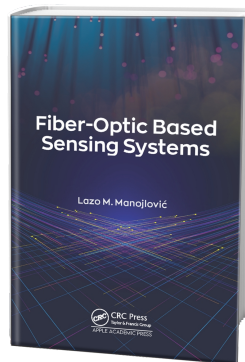


FIBER-OPTIC-BASED SENSING SYSTEMS

Lazo M. Manojlović, Ministry of Telecommunications and Information Society of the Republic of Serbia; Zrenjanin Technical College, Serbia

Presents both the latest advances in fiber-optic sensor technology, such as applications of photonic crystal fibers to fiber optic gyroscopes and recent application opportunities, including the use of fiber optic sensors as a minimally invasive medical treatment and in structural health monitoring. The book highlights the development of fiber optic sensors while also providing an overview of current methods for the construction of high-speed and high-capacity fiber optic systems. It provides a thorough presentation of novel fiber-optic based sensing systems with state-of-the-art signal processing of the interferometric signals.

342 pages with index. 6 color and 146 b/w illustrations. HB ISBN: 978-1-77463-724-1 / eBook ISBN: 9781003277293 \$179.95 US / £139.00. Forthcoming June 2022



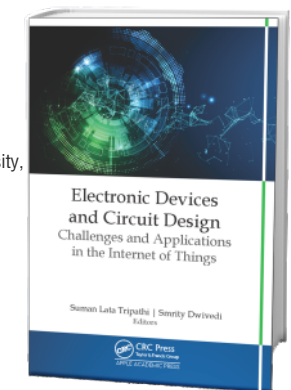
ELECTRONIC DEVICES AND CIRCUIT DESIGN

Challenges and Applications in the Internet of Things

Editors: Suman Lata Tripathi, Lovely Professional University, Smrity Dwivedi, Indian Institute of Technology BHU, India

Discusses the challenges of electronic devices and circuits for IoT applications. It presents the basic concepts and fundamentals behind new low power, high-speed efficient devices, circuits, and systems with new technology in addition to CMOS. It aims to help develop an understanding of new materials to improve device performance with smaller dimensions and lower costs. 318 pages with index. 7 color and 133 b/w illustrations.

HB ISBN: 978-1-77188-993-3 / eBook ISBN: 9781003145776 \$159.95 US / £124.00. February 2022.



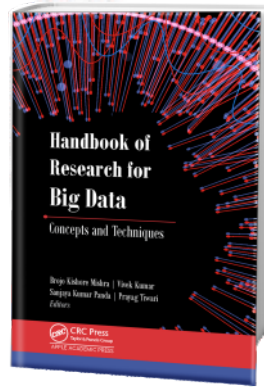
HANDBOOK OF RESEARCH FOR BIG DATA

Concepts and Techniques

Editors: Brojo Kishore Mishra, GIET University, India
Vivek Kumar, NLP Researcher with Sanjaya Kumar Panda and Prayag Tiwari

Presents information on important applications, concepts, and technologies for Big Data in the present industry and market scenario. Chapters discuss Big Data in governance, transportation, disaster management, epidemiology, and more. The book covers design and analysis of reconfigurable computing of SoC for IoT, data mining techniques and applications, the use of natural language processing in big data, and more.

400 pages with index. 19 color and 127 b/w illustrations.
HB ISBN: 978-1-77188-980-3 / eBook ISBN: 9781003144526
\$189.95 US / £147.00. February 2022.

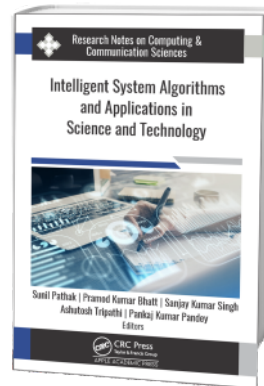


INTELLIGENT SYSTEM ALGORITHMS AND APPLICATIONS IN SCIENCE AND TECHNOLOGY

Editors: Sunil Pathak and Pramod Kumar Bhatt, Amit School of Engineering and Technology at Amity University, India
with Sanjay Kumar Singh, Ashutosh Tripathi, and Pankaj Kumar Pandey

Explores the application of intelligent techniques in various fields of engineering and technology, such as machine learning based intelligent systems for healthcare, applications of artificial intelligence and the Internet of Things, intelligent data analytics techniques, intelligent network systems and applications, and inequalities and process control systems.

428 pages with index. 25 color and 88 b/w illustrations.
HB ISBN: 978-1-77463-021-1 / eBook ISBN: 9781003187059
\$179.95 US / £139.00. February 2022.



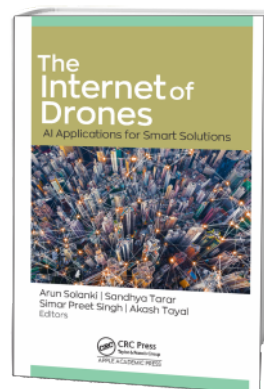
THE INTERNET OF DRONES

AI Applications for Smart Solutions

Editors: Arun Solanki, Gautam Buddha University, India
Sandhya Tarar, Centre of Excellence on Artificial Intelligence and Cyber Security, India
with Simar Preet Singh, and Akash Tayal

Provides a detailed exploration of adapting and implementing Internet of Drones (IoD) technologies into real-world applications, with the emphasis on solutions to architectural challenges, providing a clear overview of standardization and regulation, implementation plans, and privacy concerns.

422 pages with index. 10 color and 159 b/w illustrations.
HB ISBN: 978-1-77463-985-6 / eBook ISBN: 9781003277491
\$179.95 US / £139.00. August 2022.



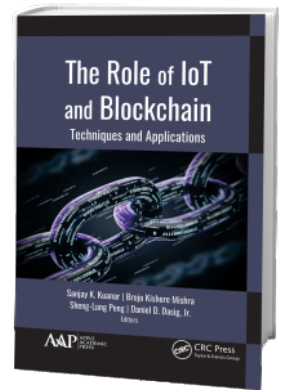
THE ROLE OF IoT AND BLOCKCHAIN

Techniques and Applications

Editors: Sanjay K. Kuanar and Brojo Kishore Mishra, GIET University, India
With Sheng-Lung Peng, and Daniel D. Dasig, Jr.

An informative collection on the emerging issues, challenges, and new methods and state-of-the-art technologies in the Internet of Things and blockchain technology. It presents case studies and solutions that can be applied in the current business scenario, resolving challenges and providing solutions by integrating IoT with blockchain technology.

500 pages with index. 19 color and 189 b/w illustrations.
HB ISBN: 978-1-77188-914-8 / eBook ISBN: 9781003048367
\$169.95 US / £131.00. February 2022.



SOFTWARE-DEFINED NETWORKING FOR FUTURE INTERNET TECHNOLOGY

Concepts and Applications

Editors: Kshira Sagar Sahoo, SRM University, India
Bibhudatta Sahoo, National Institute of Technology Rourkela, India
with Brojo Kishore Mishra

Includes quantitative research, case studies, conceptual papers, model papers, review papers, theoretical backing on how SDN can help other emerging technologies for delivering more efficient services, such as IoT, industrial IoT, NFV, big data, blockchain, cloud computing, and edge computing. The book demonstrates the many benefits of SDNs.

308 pages with index. 12 color and 53 b/w illustrations.
HB ISBN: 978-1-77188-986-5 / eBook ISBN: 9781003145721
\$159.95 US / £124.00. September 2021.



STRATEGIES FOR E-SERVICE, E-GOVERNANCE, AND CYBERSECURITY

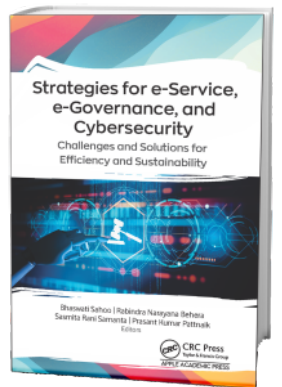
Challenges and Solutions for Efficiency and Sustainability

Editors: Bhaswati Sahoo, KIIT Deemed To be University, India

Rabindra Narayana Behera, National Informatics Center, Odisha State Centre, India
with Sasmita Rani Samanta and Prasant Kumar Pattnaik

Provides an introduction to and overview of cybersecurity in e-services and e-governance systems, discussing the most recent innovations, trends, and concerns as well as the practical challenges encountered and solutions adopted in the fields of security and e-services.

250 pages with index. 7 color and 12 b/w illustrations.
HB ISBN: 978-1-77188-970-4 / eBook ISBN: 9781003131175
\$129.95 US / £100.00. January 2022.



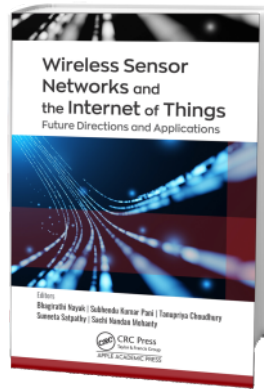
WIRELESS SENSOR NETWORKS AND THE INTERNET OF THINGS

Future Directions and Applications

Editors: Bhagirathi Nayak, Sri Sri University, India
Subhendu Kumar Pani, Orissa Engineering College, India
With Tanupriya Choudhury, Suneeta Satpathy, and Sachi Nandan Mohanty

Explores real-time issues and applications of different types of WSN and IoT technologies, placing an emphasis on solutions to protection, conservation, evaluation, and implementation of WSN and IoT that lead to low-cost products, energy savings, low carbon usage, higher quality, and global competitiveness.

380 pages with index. 18 color and 100 b/w illustrations.
HB ISBN: 978-1-77188-961-2 / eBook ISBN: 9781003131229
\$179.95 US / £139.00. September 2021.



HANDBOOK OF RESEARCH OF INTERNET OF THINGS AND CYBER-PHYSICAL SYSTEMS

An Integrative Approach to an Interconnected Future

Editors: Amit Kumar Tyagi, Vellore Institute of Technology, India
Niladhuri Sreenath, Puducherry Technological University, India
Discusses how integrating IoT devices and cyber-physical systems can help society by providing multiple efficient and affordable services to users. Topics include satellite imaging in relation to climate change, industrial control systems, e-healthcare applications, security uses, automotive and traffic monitoring and control, urban smart city planning, and more.

680 pages with index. 38 color and 162 b/w illustrations
HB ISBN: 978-1-77463-834-7 / eBook ISBN: 9781003277323
\$249.95 US / £193.00 Forthcoming July 2022

ALSO FORTHCOMING IN 2022

Advancements in Artificial Intelligence, Blockchain Technology, and IoT in Higher Education: Mitigating the Impact of COVID-19

Editors: Subhendu Kumar Pani, Kamalakanta Muduli, Sujoy Kumar Jana, Srikanth Bathula, and Golam Sarwar Khan
Approx. 322 pages with index. 10 color and 35 b/w illustrations
HB ISBN: 978-1-77491-092-4 / eBook ISBN: 9781003300458
\$179.95 US / £139.00 Forthcoming August 2022

Advances in Data Science and Computing Technology: Methodology and Applications

Editors: Suman Ghosal, Amitava Choudhury, Vikram Kr. Saxena, Arindam Biswas, and Prasenjit Chatterjee
Approx. 377 pages with index. 214 b/w illustrations
HB ISBN: 978-1-77463-997-9 / eBook ISBN: 9781003277071
\$189.95 US / £147.00 Forthcoming August 2022

Application of Deep Learning Methods in Healthcare and Medical Science

Editors: Rohit Tanwar, Prashant Kumar, Malay Kumar, and Neha Nandal
Approx. 278 pages with index. 111 b/w illustrations
HB ISBN: 978-1-77491-120-4
\$169.95 US / £131.00 Forthcoming September 2022

Computational Intelligence Applications for Software Engineering Problems

Editors: Parma Nand, Nitin Rakesh, Arun Prakash Agrawal, and Vishal Jain
Approx. 320 pages with index. 11 color and 83 b/w illustrations
HB ISBN: 978-1-77491-046-7 / eBook ISBN: 9781003283195
\$169.95 US / £131.00 Forthcoming July 2022

Computing and Communications Engineering in Real-Time Application Development

Editors: B. K. Mishra, Samarjeet Borah, and Hemant Kasturiwale
Approx. 288 pages with index. 12 color and 111 b/w illustrations
HB ISBN: 978-1-77463-836-1 / eBook ISBN: 9781003277217
\$159.95 US / £124.00 Forthcoming May 2022

Empowering Artificial Intelligence Through Machine Learning: New Advances and Applications

Editors: Nedunchezian Raju, M. Rajalakshmi, Dinesh Goyal, S. Balamurugan, Ahmed Elngar, and Bright Kesawani
264 pages with index. 19 color and 55 b/w illustrations
HB ISBN: 978978-1-77188-930-8 / eBook ISBN: 9781003055129
\$179.95 US / £139.00 Forthcoming July 2022

ALSO FORTHCOMING IN 2022

Intelligent Interactive Multimedia Systems for e-Healthcare Applications

Editors: Shaveta Malik, and Amit Kumar Tyagi
Approx. 419 pages with index. 9 color and 118 b/w illustrations
HB ISBN: 978-1-77491-022-1 / eBook ISBN: 9781003282112
\$179.95 US / £139.00 Forthcoming July 2022

Internet of Things: Technological Advances and New Applications

Editors: Brojo Kishore Mishra, and Amit Vishwasrao Salunkhe
Approx. 388 pages with index. 15 color and 17 b/w illustrations
HB ISBN: 978-1-77491-128-0
\$179.95 US / £139.00 Forthcoming September 2022

Pandemic Detection and Analysis through Smart Computing Technologies

Editors: Ram Shringar Raw, Vishal Jain, Sanjoy Das, and Meenakshi Sharma
Approx. 328 pages with index. 7 color and 58 b/w illustrations
HB ISBN: 978-1-77491-032-0 / eBook ISBN: 9781003281610
\$159.95 US / £124.00 Forthcoming June 2022

Real-Life Applications of the Internet of Things: Challenges, Applications, and Advances

Editors: Monika Mangla, Ashok Kumar, Vaishali Mehta, Megha Bhushan, and Sachi Nandan Mohanty
Approx. 477 pages with index. 11 color and 136 b/w illustrations
HB ISBN: 978-1-77463-847-7 / eBook ISBN: 9781003277460
\$189.95 US / £147.00 Forthcoming May 2022

Research Practitioner's Handbook on Big Data Analytics

S. Sasikala and D. Renuka Devi
Editor: Raghvendra Kumar
Approx. 290 pages with index. 10 color and 126 b/w illustrations
HB ISBN: 978-1-77491-052-8 / eBook ISBN: 9781003284543
\$159.95 US / £124.00 Forthcoming July 2022

VLSI Architecture for Signal, Speech, and Image Processing

Editors: Durgesh Nandan, Basant Kumar Mohanty, Sanjeev Kumar, and Rajeev Kumar Arya
Approx. 366 pages with index. 190 b/w illustrations
HB ISBN: 978-1-77463-730-2 / eBook ISBN: 9781003277538
\$189.95 US / £147.00 Forthcoming May 2022

COVID-19 & PANDEMIC STUDIES

EXPLORING THE CONSEQUENCES OF THE COVID-19 PANDEMIC

Social, Cultural, Economic, and Psychological Insights and Perspectives

Editors: Usha Rana, Dr. Harisingh Gour Central University, India

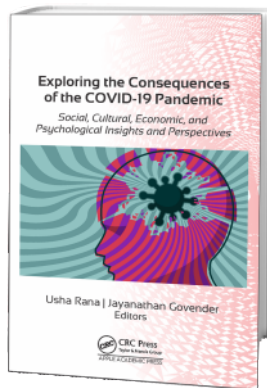
Jayanathan Govender, University of KwaZulu-Natal, South Africa

Assesses the impact of coronavirus disease (COVID-19) on a multitude of different aspects of human life, such as mental health, health care, gender issues, education, social institutions, and more.

464 pages with index. 11 color and 44 b/w illustrations.

HB ISBN: 978-1-77463-864-4 / eBook ISBN: 9781003277286

\$169.95 US / £131.00. July 2022.



PANDEMIC DETECTION AND ANALYSIS THROUGH SMART COMPUTING TECHNOLOGIES

Editors: R. S. Raw, Netaji Subhas University of Technology, India

Vishal Jain, Sharda University, India

With Sanjoy Das and Meenakshi Sharma

Explores the roles that IoT and AI technologies played during the recent COVID-19 global pandemic. It discusses the how existing and new state-of-the-art technology has been and can be applied for global health crises, such as for virus detection, prediction, classification, prevention, and communication outreach.

301 pages with index. 8 color and 58 b/w illustrations.

HB ISBN: 978-1-77491-032-0 / eBook ISBN: 9781003281610

\$159.95 US / £124.00. May 2022.

ALSO FORTHCOMING IN 2022

Advancements in Artificial Intelligence, Blockchain Technology, and IoT in Higher Education: Mitigating the Impact of COVID-19

Editors: Subhendu Kumar Pani, Kamalakanta Muduli, Sujoy Kumar Jana, Srikanth Bathula, and Golam Sarwar Khan

Approx. 322 pages with index. 10 color and 35 b/w illustrations

HB ISBN: 978-1-77491-092-4 / eBook ISBN: 9781003300458

\$179.95 US / £139.00 Forthcoming August 2022

Marketing by Contingency in the Time of COVID-19: Overcoming Business Crises and Meeting Marketing Challenges

Editors: Alicia de la Peña, and Juan Bernardo Amezcua Nunez

Approx. 250 pages with index. 10 color and 13 b/w illustrations

HB ISBN: 978-1-77491-105-1 / eBook ISBN: 9781003300694

\$149.95 US / £116.00 Forthcoming September 2022

The COVID-19 Pandemic: A Multidisciplinary Review of Diagnosis, Prevention, and Treatment

Editors: Hanadi Talal Ahmedah, Muhammad Riaz,

Sagheer Ahmed, and Marius Alexandru Moga

Approx. 485 pages with index. 16 color and 75 b/w illustrations

HB ISBN: 978-1-77491-050-4 / eBook ISBN: 9781003283607

\$199.95 US / £154.00 Forthcoming May 2022

The Nature and Future of Tourism: A Post-COVID-19 Context

Maximiliano E. Korstanje, and Babu P. George

276 pages with index. 1 b/w illustration

978-1-77463-729-6 / eBook ISBN: 9781003277507

\$159.95 US / £124.00 Forthcoming June 2022

For complete contents, prices, and more information, click on the book cover or title.

EDUCATION & TEACHING

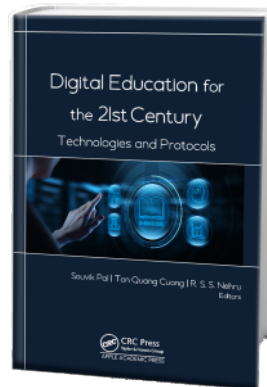
DIGITAL EDUCATION FOR THE 21ST CENTURY

Technologies and Protocols

Editors: Souvik Pal, Global Institute of Management and Technology, India
Ton Quang Cuong,
Vietnam National University, Vietnam
with R. S. S. Nehru

Highlights the evolution of digital education related issues and by reporting on effective IoT-based technologies for the teaching-learning, discussing many aspects of digital pedagogy in the Education of Things. The chapters cover the concepts of IoT-based digital technologies regarding teacher and teaching education, IoT-based education, flipped learning, assessment process, and more.

388 pages with index. 6 color and 143 b/w illustrations.
HB ISBN: 978-1-77463-007-5 / eBook ISBN: 9781003180517
\$169.95 US / £131.00. December 2021.



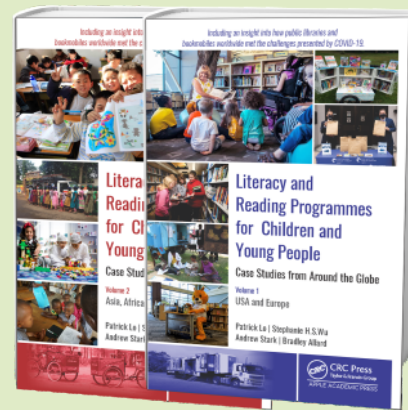
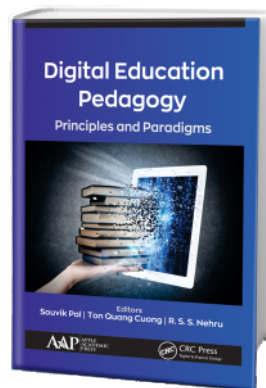
DIGITAL EDUCATION PEDAGOGY

Principles and Paradigms

Editors: Souvik Pal, Global Institute of Management and Technology, India
Ton Quang Cuong,
Vietnam National University, Vietnam
with R. S. S. Nehru

Discusses flipped learning and blended learning, student-centric and teacher-centric learning in technical institutes, critical digital pedagogies, and the complex analyses and collaborations with organizations outside the academy. Also deals with the protocols for educational and administrative policies, IoT-based teaching-learning methodology, teaching education and the process of assessment, testing and evaluation, integration of technology with digital education, and different case-study-based approaches in digital teaching-learning methodology.

278 pages with index. 14 color and 77 b/w illustrations.
HB ISBN: 978-1-77188-887-5 / eBook ISBN: 9781003009214
\$159.95 US / £124.00. December 2020.



LITERACY AND READING PROGRAMMES FOR CHILDREN AND YOUNG PEOPLE

Case Studies from Around the Globe, 2-volume set:

Volume 1: USA and Europe

Volume 2: Asia, Africa, Australia, and the Middle East

Patrick Lo, University of Tsukuba, Japan
With Stephanie H. S. Wu, Andrew J. Stark, and Bradley Allard

"An indispensable compilation of the best practices in the library industry. . . . This exceptional compilation of case studies is sure to imbue the reader with sparks for a myriad of great ideas and at the same time, help mitigate the chances of falling into a hole."—Lance M. Werner, Executive Director of the Kent District Library, Michigan

Presents interviews with over 40 librarians from around the world who tell of their library programs. It highlights the diversity of the types of programs catering to the varying needs of children and young adults throughout the world. Case studies outline the details of programs, events, and activities provided by over 40 organizations in the context of social capital and social inclusion.

2-VOLUME SET:

692 pages with index. 156 b/w illustrations.
HB ISBN: 978-1-77463-032-7 / eBook ISBN: 9781003189343
\$299.95 US / £231.00. January 2022.

VOLUME 1: USA AND EUROPE

348 pages with index. 81 b/w illustrations.
HB ISBN: 978-1-77463-030-3 / eBook ISBN: 9781003189268
\$149.95 US / £116.00.

VOLUME 2: ASIA, AFRICA, AUSTRALIA, AND THE MIDDLE EAST

344 pages with index. 75 b/w illustrations.
HB ISBN: 978-1-77463-031-0 / eBook ISBN: 9781003189275
\$149.95 US / £116.00.

ROLE OF ICT IN HIGHER EDUCATION

Trends, Problems, and Prospects

Editors: Gopal Singh Latwal, and Sudhir Kumar Sharma, Institute of Information Technology and Management, Janakpuri, India
With Prerna Mahajan, and Piet Kommers

Focuses on ICT and data analytics in education. It focuses mainly on technological advancement for effective teaching learning that includes ICT in education, the perceived role of ICT in the teaching-learning transaction, pedagogy for teaching-learning in the 21st century, student-centered learning based on ICT, learning analytics, online technologies learning, tools for technology enhanced learning, distance education and learning, the effective use of ICT in management education, experiences in ICT for technology-enhanced learning, influence of ICT in research development in higher education, etc.

464 pages with index. 6 color and 69 b/w illustrations.
HB ISBN: 978-1-77188-962-9 / eBook ISBN: 9781003130864
\$169.95 US / £131.00. November 2020.

For complete contents, prices, and more information, click on the book cover or title.

ENERGY SCIENCE

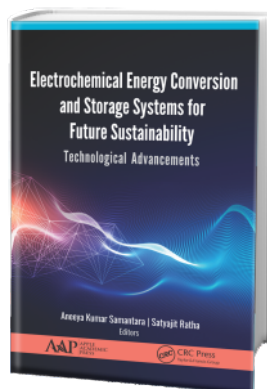
ELECTROCHEMICAL ENERGY CONVERSION AND STORAGE SYSTEMS FOR FUTURE SUSTAINABILITY

Technological Advancements

Editors: Aneeya Kumar Samantara, National Institute of Science Education and Research, India
Satyajit Ratha, Indian Institute of Technology

Discusses new and well-known electrochemical energy harvesting, conversion, and storage techniques. Topics including photoelectrochemical catalysis by ZnO, hydrogen oxidation reaction for fuel cell application, and miniaturized energy storage devices in the form of micro-supercapacitors.

354 pages with index. 14 color and 75 b/w illustrations.
HB ISBN: 978-1-77188-885-1 / eBook ISBN: 9781003009320
\$189.95 US / £147.00. November 2020.



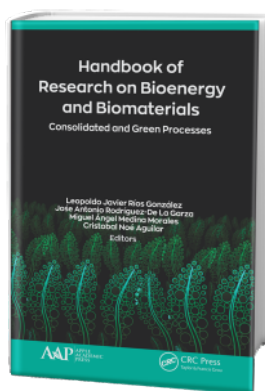
HANDBOOK OF RESEARCH ON BIOENERGY AND BIOMATERIALS

Consolidated and Green Processes

Editors: Leopoldo Javier Ríos González, and Joé Antonio Rodríguez-De La Garza, Autonomous University of Coahuila, México
With Miguel Ángel Medina Morales, and Cristóbal Noé Aguilar

Provides an understanding of consolidated processing and biorefinery systems for the production of bio-based chemicals and value-added bioproducts from renewable sources. The chapters look at bioenergy technological advances and improvements in the energy and materials sectors that aim to lower our dependence of fossil fuels and consequently reduce greenhouse gas emissions.

735 pages with index. 112 b/w illustrations.
HB ISBN: 978-1-77188-955-1 / eBook ISBN: 9781003105053
\$249.95 US / £193.00. December 2021.



LATENT HEAT-BASED THERMAL ENERGY STORAGE SYSTEMS

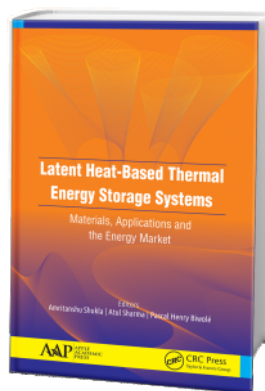
Materials, Applications, and the Energy Market

Editors: Amritanshu Shukla and Atul Sharma, Rajiv Gandhi Institute of Petroleum Technology, India

With Pascal Henry Biwolé

Offers up-to-date coverage of the fundamentals as well as recent advancements in energy efficient thermal energy storage materials, their characterization, and technological applications.

354 pages with index. 196 b/w illustrations.
HB ISBN: 978-1-77188-858-5 / eBook ISBN: 9780429328640
\$169.95 US / £131.00. September 2020.



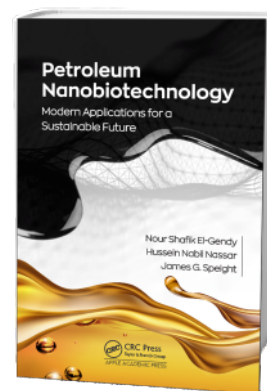
PETROLEUM NANOTECHNOLOGY

Modern Applications for a Sustainable Future

Nour Shafik El-Gendy, and Hussein Nabil Nassar, Egyptian Petroleum Research Institute
With James G. Speight

Explores the unique fusion of biotechnology and nanotechnology as applied to the different sectors of the oil and gas industry. It covers the advantages of biofabrication over chemical or physical techniques as well as microbial and photosynthesis of metal and metal oxide nanoparticles. The key applications discussed here include the application of these nanoparticles in different sectors of the oil and gas industry, with special emphasis on antimicrobial applications, reduction of environmental pollutants, and bio-upgrading of petroleum and its fractions.

522 pages with index. 15 color and 67 b/w illustrations.
HB ISBN: 978-1-77463-005-1 / eBook ISBN: 9781003160564
\$229.95 US / £177.00. March 2022.



SUSTAINABLE ENGINEERING, ENERGY, AND THE ENVIRONMENT

Challenges and Opportunities

Editors: Kailas L. Wasewar, Visvesvaraya National Institute of Technology, India
Sumita Neti Rao, Priyadarshini Institute of Engineering and Technology, India

An interdisciplinary look at the latest developments, advances, and trends in the interrelated areas of sustainable engineering, energy, and the environment, focusing on environmental engineering for renewable and green energy. It looks at new research and studies on a variety of topics in green nanotechnology, green processing and solar energy, sustainable energy policies, biofuels, fuel cells, and much more.

550 pages with index. 23 color and 170 b/w illustrations.
HB ISBN: 978-1-77491-000-9 / eBook ISBN: 9781003277484
\$179.95 US / £139.00. July 2022.



ALSO FORTHCOMING IN 2022

Carbon Nanotubes for Energy and Environmental Applications

Editors: Soney C. George, Jacob Philip, Ann Rose Abraham, and A. K. Haghi
Approx. 335 pages with index. 17 color and 44 b/w illustrations
HB ISBN: 978-1-77463-717-3 / eBook ISBN: 9781003189183
\$179.95 US / £139.00 Forthcoming August 2022

Deregulated Electricity Market: The Smart Grid Perspective

Editors: Baseem Khan, Om Prakash Mahela, Hassan Haes Alhelou, and Sanjeevikumar Padmanaban
Approx. 398 pages with index. 29 color and 154 b/w illustrations
HB ISBN: 978-1-77463-843-9 / eBook ISBN: 9781003277231
\$179.95 US / £139.00 Forthcoming July 2022

Hydrocarbon Biotechnology: Challenges and Future Trends

Editors: Wael Ahmed Ismail, and Jonathan Van Hamme
Approx. 413 pages with index. 17 color and 42 b/w illustrations
HB ISBN: 978-1-77463-989-4 / eBook ISBN: 9781003277354
\$189.95 US / £147.00 Forthcoming May 2022

ENVIRONMENTAL SCIENCE & CLIMATE CHANGE

ADVANCES IN SUSTAINABLE DEVELOPMENT AND MANAGEMENT OF ENVIRONMENTAL AND NATURAL RESOURCES

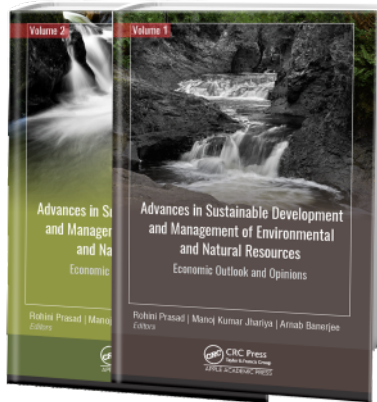
Economic Outlook and Opinions, 2-volume set

Editors: Rohini Prasad,
Pt. Ravishankar Shukla University, India
Manoj Kumar Jhariya, Sant Gahira Guru Vishwavidyalaya, India
With Arnab Banerjee

Taking an economics point of view, it discusses natural resources and environmental management including soil and water resources management in arid lands, resource management for agricultural purposes, contemporary global legal norms of environment and sustainable development, how emissions factor into regional economies, mitigation of the impact of climate change through sustainable practices, rainwater harvesting technology, and much more. The chapters include case studies that discuss soil, agroforestry, agriculture, wetlands, and floral diversity.

2-VOLUME SET:

894 pages with index. 18 color and 138 b/w illustrations.
HB ISBN: 978-1-77463-067-9 / eBook ISBN: 9781003187455
\$299.95 US / £231.00. December 2021.



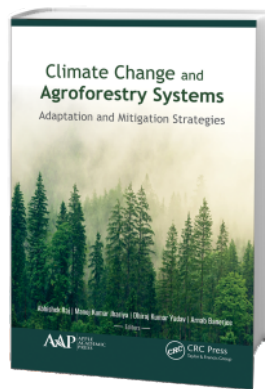
CLIMATE CHANGE AND AGROFORESTRY SYSTEMS

Adaptation and Mitigation Strategies

Editors: Abhishek Raj, Indira Gandhi Krishi
Vishwavidyalaya, India
Manoj Kumar Jhariya, Sarguja University
Ambikapur, India
With Dhiraj Kumar Yadav and Arnab Banerjee

Addresses the burning issues of the impact of climate change, the alteration of environmental quality, and subsequent mitigation and adaptation strategies through various agroecosystem practices, primarily in agroforestry. It provides new insights in the field of role of agroecosystems toward combating the negative impact of climate change as well as maintaining the sustainability of ecosystem.

422 pages with index. 22 color and 95 b/w illustrations.
HB ISBN: 978-1-77188-822-6 / eBook ISBN: 9780429286759
\$169.95 US / £131.00. February 2020.



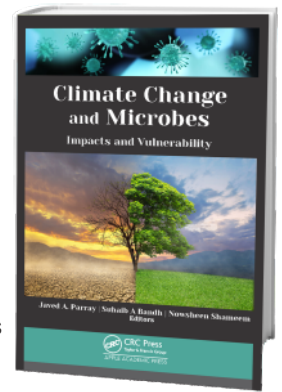
CLIMATE CHANGE AND MICROBES

Impacts and Vulnerability

Editors: Javid A. Parray,
Government Degree College Eidgah, India
Suhaib A. Bandh,
Government Degree College Pulwama, India
With Nowsheen Shameem

An enlightening picture of the role of microbial wealth for sustaining life systems and how climatic factors will change the course of the processes. It explores the effects of climate change on microbial ecosystems and the influence of climate change on microbiome diversity across various habitats and regions.

355 pages with index. 6 color illustrations.
HB ISBN: 978-1-77463-721-0 / eBook ISBN: 9781003189725
\$169.95 US / £131.00. May 2022.



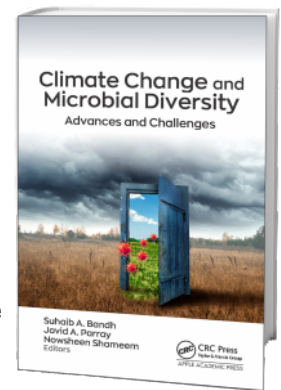
CLIMATE CHANGE AND MICROBIAL DIVERSITY

Advances and Challenges

Editors: Suhaib A. Bandh,
Government Degree College Kulgam, India
Javid A. Parray,
Government Degree College Eidgah, India
With Nowsheen Shameem

Explores the microbial responses of plants and soils caused directly or indirectly by climate change resulting from rising greenhouse gases and other factors. It discusses the adaptation and mitigations of plants and soils, specifically addressing such topics as biogeochemical processes, antimicrobial resistance, the dynamics of bacteria and fungus in extreme environments, bacterial siderophores for sustainability, and more.

277 pages with index. 13 color and 8 b/w illustrations.
HB ISBN: 978-1-77463-782-1 / eBook ISBN: not yet set
\$159.95 US / £124.00. August 2022.

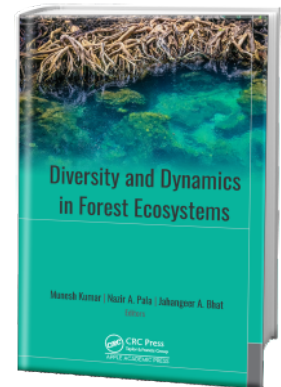


DIVERSITY AND DYNAMICS IN FOREST ECOSYSTEMS

Editors: Munesh Kumar,
H.N.B. Garhwal University, India
Nazir A. Pala, SKUAST-Kashmir, India
With Jahangeer A. Bhat

Looks at the diversity of forest ecosystems and explores such aspects as forest products in enhancing local livelihoods and community participation, forage production, forest conservation and sustainable management, regeneration patterns, seed handling, and more.

404 pages with index. 8 color and 88 b/w illustrations.
HB ISBN: 978-1-77188-979-7 / eBook ISBN: 9781003145318
\$169.95 US / £131.00. December 2021.



For complete contents, prices, and more information,
click on the book cover or title.

ENVIRONMENTAL AND SUSTAINABLE DEVELOPMENT THROUGH FORESTRY AND OTHER RESOURCES

Editors: Arnab Banerjee and Manoj Kumar Jhariya, Sarguja University, India

With Dhiraj Kumar Yadav and Abhishek Raj Discusses using agroforestry for resource management, employing legumes in agroforestry, livestock management for climate change mitigation, introducing higher plants for air pollution mitigation in urban industrial areas, the uses and benefits of sludge, technological assessment of sewage treatment plants, and much more.

338 pages with index. 25 color and 109 b/w illustrations.
HB ISBN: 978-1-77188-811-0 / eBook ISBN: 9780429276026
\$169.95 US / £131.00. January 2020.



SUSTAINABLE BIORESOURCE MANAGEMENT

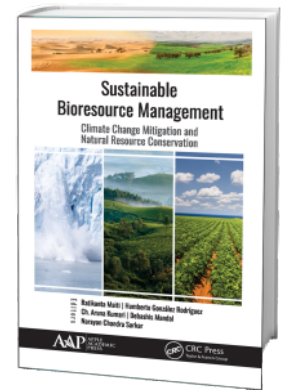
Climate Change Mitigation and Natural Resource Conservation

Editors: Ratikanta Maiti, University of Nuevo León, Mexico

Humberto González Rodríguez, Universidad Automa de Nuevo Leon, Mexico
With Ch. Aruna Kumari, Debashis Mandal, and Narayan Chandra Sarkar

Looks topics in nature and changing climate management, adaptation, and mitigation, such as the effects of climate change on agriculture and horticulture, on timber harvesting, and on forest resources. Also specifically discussed is crop resources management, seed crops, tree seedlings, soil management, and conservation practices. The volume also includes chapters on animal resources management.

526 pages with index. 25 color and 41 b/w illustrations.
HB ISBN: 978-1-77188-815-8 / eBook ISBN: 9780429284229
\$189.95 US / £147.00. April 2020.



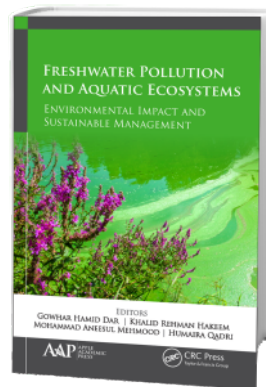
FRESHWATER POLLUTION AND AQUATIC ECOSYSTEMS

Environmental Impact and Sustainable Management

Editors: Gowhar Hamid Dar, Sri Pratap College, Cluster University, India
Khalid Rehman Hakeem, King Abdulaziz University, Saudi Arabia
With Mohammad Aneesul Mehmood and Humaira Qadri

Considers the environmental impacts of pollution on freshwater aquatic ecosystems and presents sustainable management and practices and advanced technology for sustainable biodiversity conservation and management.

388 pages with index. 11 color and 11 b/w illustrations.
HB ISBN: 978-1-77188-958-2 / eBook ISBN: 9781003130116
\$179.95 US / £139.00. December 2021.



ALSO FORTHCOMING IN 2022

Advances in Hydrology and Climate Change: Historical Trends and New Approaches in Water Resources Management

Editors: Surendra Kumar Chandniha, Anil Kumar Lohani, Gopal Krishan, and Ajay Krishna Prabhakar

Approx. 487 pages with index. 9 color and 164 b/w illustrations
HB ISBN: 978-1-77491-030-6 / eBook ISBN: 9781003282365
\$189.95 US / £147.00 Forthcoming July 2022

Biodiversity of Freshwater Ecosystems: Threats, Protection, and Management

Editors: Suhaib A. Bandh, Basharat Mushtaq, Mohammad Farooq Mir, and Shahid A. Wani

Approx. 275 pages with index. 17 color and 18 b/w illustrations
HB ISBN: 978-1-77491-002-3 / eBook ISBN: 9781003277125
\$169.95 US / £131.00 Forthcoming February 2022

Environmental Biotechnology: Sustainable Remediation of Contamination in Different Environs

Editors: Rouf Ahmad Bhat, Moonisa Aslam Dervash, Khalid Rehman Hakeem, and Khalid Zaffar Masoodi

Approx. 355 pages with index. 12 color and 3 b/w illustrations
HB ISBN: 978-1-77463-830-9 / eBook ISBN: 9781003277279
\$159.95 US / £124.00 Forthcoming May 2022

Nanotechnology for Environmental Pollution Decontamination: Tools, Methods, and Approaches for Detection and Remediation

Editors: Fernanda Maria Policarpo Tonelli, Rouf Ahmad Bhat, and Gowhar Hamid Dar

Approx. 591 pages with index. 15 color and 52 b/w illustrations
HB ISBN: 978-1-77491-040-5 / eBook ISBN: 9781003279563
\$189.95 US / £147.00 Forthcoming July 2022

The Science and Technology of the Environment

James G. Speight

Approx. 700 pages with index. 28 b/w illustrations
HB ISBN: 978-1-77463-976-4 / eBook ISBN: 9781003277514
\$229.95 US / £177.00 Forthcoming May 2022

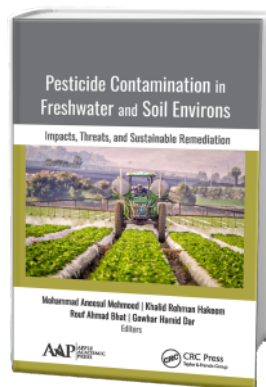
PESTICIDE CONTAMINATION IN FRESHWATER AND SOIL ENVIRONS

Impacts, Threats, and Sustainable Remediation

Editors: Mohammad Aneesul Mehmood, Cluster University Srinagar, India
Khalid Rehman Hakeem, King Abdulaziz University, Saudi Arabia
With Rouf Ahmad Bhat and Gowhar Hamid Dar

Details the challenges along with and bioremediation and remediation measures, such as the use of beneficial microorganisms, polymeric nanocomposites for nano-remediation, phytoremediation, and more. It looks at pesticide contamination from agricultural activities in a variety of different environs and a selection of sustainable and eco-friendly remediation approaches.

388 pages with index. 7 color and 8 b/w illustrations.
HB ISBN: 978-1-77188-953-7 / eBook ISBN: 9781003104957
\$189.95 US / £147.00. July 2021.



For complete contents, prices, and more information, click on the book cover or title.

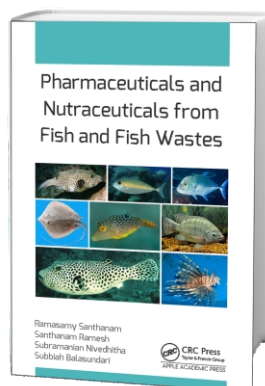
FISHERIES & MARINE SCIENCE

PHARMACEUTICALS AND NUTRACEUTICALS FROM FISH AND FISH WASTES

Ramasamy Santhanam, Fisheries College and Research Institute, Tamilnadu Veterinary and Animal Sciences University, India
Santhanam Ramesh, Ratnam Institute of Pharmacy Nellore, India
With Subramanian Nivedhitha, and Subbiah Balasundari

Relays important aspects on the pharmaceutical and nutraceutical values of 175 species of bony and cartilaginous fishes as well as the uses of fish processing byproducts and wastes. Presented in an easy-to-read style, it provides precise identification of freshwater and marine fishes possessing pharmaceutical and nutraceutical compounds along with over 180 photographs. Aspects covered include biology, ecology, diagnostic features, and pharmaceutical and nutraceutical compounds along with their activities for each of the fish included.

254 pages with index. 180 b/w illustrations.
HB ISBN: 978-1-77463-010-5 / eBook ISBN: 9781003180548
\$159.95 US / £124.00. April 2021.



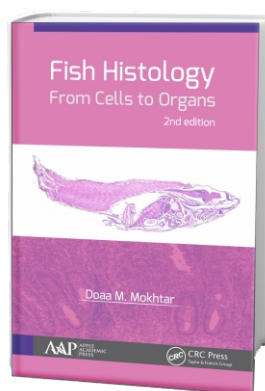
FISH HISTOLOGY,

2nd Edition: From Cells to Organs

Doaa M. Mokhtar, Assiut University, Egypt

Provides up-to-date information that emphasizes the relationships and concepts by which cell and tissue structures of fish are inextricably linked with their function. The book also describes the most recent developments in the sciences of fish histology. Includes over 270 diagrams, photos, and illustrations. to elucidate the structure of organs and to enhance the usefulness of the text.

442 pages with index.
232 color and 39 b/w illustrations.
HB ISBN: 978-1-77188-945-2 /
eBook ISBN: 9781003097419
\$189.95 US / £147.00. July 2021.



ALSO OF INTEREST

Biology and Culture of Portunid Crabs of World Seas

Ramasamy Santhanam
416 pages with index. 26 color and 253 b/w illustrations
HB ISBN: 978-1-77188-590-4 / eBook ISBN: 978-1-315-20581-6
\$169.95 US / £131.00 January 2018

Biology and Ecology of Edible Marine Bivalve Molluscs

Ramasamy Santhanam
506 pages with index. 15 color and 324 b/w illustrations
HB ISBN: 978978-1-77188-626-0 / eBook ISBN: 978-1-315-11153-7
\$169.95 US / £131.00 June 2018

Biology and Ecology of Edible Marine Gastropod Molluscs

Ramasamy Santhanam
474 pages with index. 15 color and 266 b/w illustrations
HB ISBN: 978978-1-77188-638-3 / eBook ISBN: 9781315099439
\$159.95 US / £124.00 July 2018

Biology and Ecology of Toxic Pufferfish

Ramasamy Santhanam
434 pages with index. 21 color and 235 b/w illustrations
HB ISBN: 978978-1-77188-439-6 / eBook ISBN: 978-1-315-36601-2
\$159.95 US / £124.00 December 2017

Biology and Ecology of Venomous Marine Snails

Ramasamy Santhanam
408 pages with index. 310 b/w illustrations
HB ISBN: 978978-1-77188-330-6 / eBook ISBN: 978-1-77188-331-3
\$170.00 US / £105.00 September 2016

Biology and Ecology of Venomous Stingrays

Ramasamy Santhanam
386 pages with index. 31 color and 212 b/w illustrations
HB ISBN: 978978-1-77188-538-6 / eBook ISBN: 9781315207438
\$169.95 US / £131.00 December 2017

For complete contents, prices, and more information, click on the book cover or title.

FOOD SCIENCE, FOOD CHEMISTRY & FOOD DESIGN

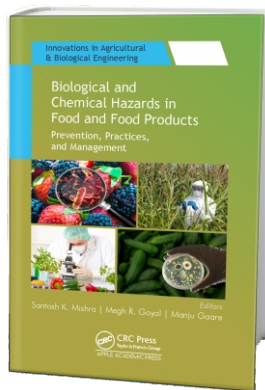
BIOLOGICAL AND CHEMICAL HAZARDS IN FOOD AND FOOD PRODUCTS

Prevention, Practices, and Management

Editors: Santosh K. Mishra, Guru Angad Dev Veterinary and Animal Sciences University, India
Megh R. Goyal, University of Puerto Rico
with Manju Gaare, PhD

Outlines methods and practices for the diagnosis, prevention, and management of hazards in food production processes. It covers mycotoxins, foodborne pathogens, antibiotic residues from dairy animals, pesticide residues, the presence of heavy metals in food, and more. Chapters also address food allergy management and offer lessons and practices in food recall situations.

338 pages with index. 17 color and 5 b/w illustrations.
HB ISBN: 978-1-77463-713-5 / eBook ISBN: 9781003189183
\$169.95 US / £131.00. June 2022.

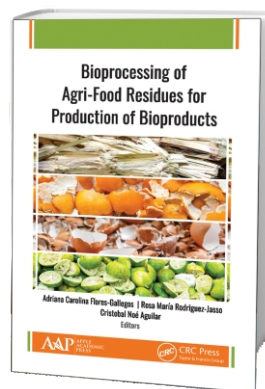


BIOPROCESSING OF AGRI-FOOD RESIDUES FOR PRODUCTION OF BIOPRODUCTS

Editors: Adriana Carolina Flores-Gallegos, and Rosa María Rodríguez-Jasso, Autonomous University of Coahuila, Mexico
With Cristóbal Noé Aguilar

Presents research and scientific advances in the field of the food bioprocessing, bioproducts, valorization of agricultural and food wastes, microbiology, and biotechnology. It explores advances in the valorization of agri-food residues for the production of bioproducts and in the development of several bioprocessing strategies.

294 pages with index. 7 color and 34 b/w illustrations.
HB ISBN: 978-1-77188-916-2 / eBook ISBN: 9781003048305
\$179.95 US / £139.00. September 2021.



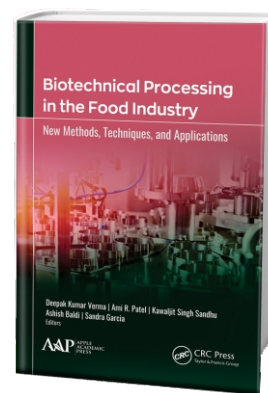
BIOTECHNICAL PROCESSING IN THE FOOD INDUSTRY

*New Methods, Techniques,
and Applications*

Editors: Deepak Kumar Verma,
Indian Institute of Technology
Ami R. Patel, Mansinhbhai Institute of
Dairy & Food Technology, India
With Kawaljit Singh Sandhu, Ashish Baldi,
and Sandra Garcia

Explores several new techniques and technologies in dairy and food sector by making the processes more stable and more economically viable. The book looks at technological trends and advances in dairy research and industry, emerging technological developments, and potential advanced research in the food, health and processing industry.

322 pages with index. 11 color and 54 b/w illustrations.
HB ISBN: 978-1-77188-912-4 / eBook ISBN: 9781003057543
\$169.95 US / £131.00. March 2021.

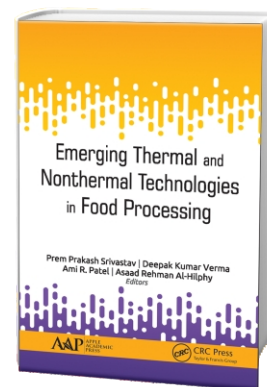


EMERGING THERMAL AND NONTHERMAL TECHNOLOGIES IN FOOD PROCESSING

Editors: Prem Prakash Srivastav, and
Deepak Kumar Verma, Indian Institute of Technology
Kharagpur
With Ami R. Patel and Asaad Rehman Al-Hilphy

A comprehensive overview of thermal and nonthermal processing of food with new and innovative technologies. It showcases recent innovations in thermal as well as nonthermal technologies, which are specifically applied for potable water and fluid foods (milk, juice, soups, etc.) and discusses fluid and microbial characteristics and quality dynamics that facilitate the adoption of new technology for food processing.

316 pages with index. 16 color and 44 b/w illustrations.
HB ISBN: 978-1-77188-831-8 / eBook ISBN: 9780429297335
\$159.95 US / £124.00. June 2020.



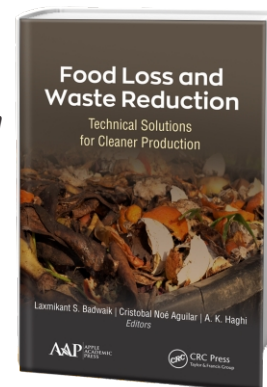
FOOD LOSS AND WASTE REDUCTION

Technical Solutions for Cleaner Production

Editors: Laxmikant S. Badwaik,
Tezpur University, India
Cristobal Noé Aguilar,
Universidad Autonoma de Coahuila, Mexico
With A. K. Haghi

Provides an in-depth, research-based overview of food loss and waste. Topics include edible/biodegradable hydrogels as a packaging material to protect food loss, using encapsulation as a food preservation technique, cold plasma in food processing, food waste in transportation, use of various forms of energy for food processing, recovery, separation, and purification of biocompounds with potential application in the food industry, etc.

298 pages with index. 38 b/w illustrations.
HB ISBN: 978-1-77188-939-1 / eBook ISBN: 9781003083900
\$179.95 US / £139.00. September 2021.



For complete contents, prices, and more information,
click on the book cover or title.

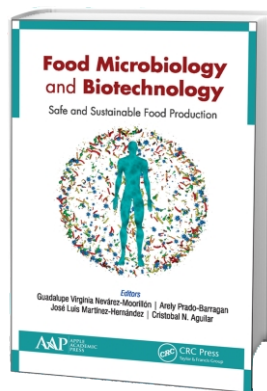
FOOD MICROBIOLOGY AND BIOTECHNOLOGY

Safe and Sustainable Food Production

Editors: Guadalupe Virginia Nevárez-Moorillón and Arely Prado-Barragan, Autonomous University of Chihuahua, Mexico
With José Luis Martínez-Hernández and Cristóbal Noé Aguilar

Explores advances in food microbiology and biotechnology, with special emphasis on the challenges that the industry faces in the era of sustainable development and food security problems. It discusses food bioprocesses, fermentation, food microbiology, functional foods, nutraceuticals, extraction of natural products, nano- and micro-technology, innovative processes/bioprocesses for utilization of by-products, alternative processes requiring less energy or water, among other topics.

478 pages with index. 4 color and 27 b/w illustrations
HB ISBN: 978-1-77188-838-7 / eBook ISBN: 9780429322341
\$179.95 US / £139.00 June 2020.



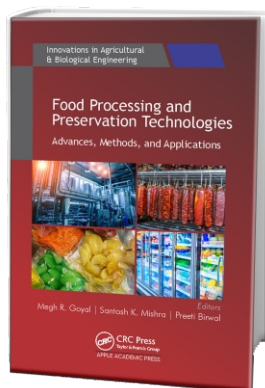
FOOD PROCESSING AND PRESERVATION TECHNOLOGY

Advances, Methods, and Applications

Editors: Megh R. Goyal, University of Puerto Rico
Santosh K. Mishra, College of Dairy Science and Technology, Guru Angad Dev Veterinary and Animal Sciences University, India
With Preeti Birwal

Confronts the challenges of food preservation by providing new research on novel processing and preservation technologies during production, processing, and transportation in the food industry for the improvement of shelf life and the safety of foods. It discusses dielectric heating and ohmic heating, three-dimensional printing of foods, ozonization of food products, drying technologies, food fermentation technologies, mechanization of traditional indigenous products, etc.

312 pages with index. 7 color and 22 b/w illustrations.
HB ISBN: 978-1-77188-995-7 / eBook ISBN: 9781003153184
\$169.95 US / £131.00. April 2022.



FOOD PRODUCT OPTIMIZATION FOR QUALITY AND SAFETY CONTROL

Process, Monitoring, and Standards

Editors: Juan Carlos Contreras-Esquivel, Universidad Autonoma de Coahuila, Mexico
Laxmikant S. Badwaik, Tezpur University, India
With Porteen Kannan and A. K. Haghi

Looks at food safety with a multi-faceted perspective, using microbiology, chemistry, standards and regulations, and risk management to address issues involving bacterial pathogens, chemical contaminants, natural toxicants, additive safety, allergens, and more. The varied topics include the role of mineral content of soils in food safety, microwave-assisted extraction of phenolic compounds, foodborne pathogenic anaerobes, enzymatic modification of ferulic acid content, and more.

418 pages with index. 21 color and 49 b/w illustrations.
HB ISBN: 978-1-77188-879-0 / eBook ISBN: 9781003003144
\$169.95 US / £131.00. December 2020.

HANDBOOK OF RESEARCH ON FOOD PROCESSING AND PRESERVATION TECHNOLOGIES, 5-VOLUME SET

Volume 1: Nonthermal and Innovative Food Processing Methods

Volume 2: Nonthermal Food Preservation and Novel Processing Strategies

Volume 3: Computer-Aided Food Processing and Quality Evaluation Techniques

Volume 4: Design and Development of Specific Foods, Packaging Systems, and Food Safety

Volume 5: Emerging Techniques for Food Processing, Quality, and Safety Assurance

Editors: Megh R. Goyal, University of Puerto Rico
Preeti Birwal, Punjab Agricultural University, India
With Monika Sharma

Highlights various design, development, and applications of novel and innovative strategies for food processing and preservation. The roles and applications of minimal processing techniques (such as ozone treatment, vacuum drying, osmotic dehydration, dense phase carbon dioxide treatment, pulsed electric field, and high-pressure assisted freezing) are discussed, along with a wide range of other applications. The handbook also explores some exciting computer-aided techniques emerging in the food processing sector, such as robotics, radio frequency identification (RFID), three-dimensional food printing, artificial intelligence, etc. Some emphasis has also been given on nondestructive quality evaluation techniques (such as image processing, terahertz spectroscopy imaging technique, near infrared, Fourier transform infrared spectroscopy technique, etc.) for food quality and safety evaluation. The significant roles of food properties in the design of specific foods and edible films have been elucidated as well.

5-VOLUME SET:

1698 pages with index. 62 color and 94 b/w illustrations.
HB ISBN: 978-1-77463-036-5 / eBook ISBN: 9781003184812
\$900 US November 2021.

VOLUME 1: NONTHERMAL AND INNOVATIVE FOOD PROCESSING METHODS

322 pages with index. 12 color and 15 b/w illustrations.
HB ISBN: 978-1-77188-982-7 / eBook ISBN: 9781003153221
\$179.95 US / £139.00.

VOLUME 2: NONTHERMAL FOOD PRESERVATION AND NOVEL PROCESSING STRATEGIES

324 pages with index. 8 color and 31 color illustrations.
HB ISBN: 978-1-77463-003-7 / eBook ISBN: 9781003161295
\$179.95 US / £139.00.

VOLUME 3: COMPUTER-AIDED FOOD PROCESSING AND QUALITY EVALUATION TECHNIQUES

350 pages with index. 22 color and 17 b/w illustrations.
HB ISBN: 978-1-77463-033-4 / eBook ISBN: 9781003184591
\$179.95 US / £139.00.

VOLUME 4: DESIGN AND DEVELOPMENT OF SPECIFIC FOODS, PACKAGING SYSTEMS, AND FOOD SAFETY

320 pages with index. 7 color and 9 color illustrations.
HB ISBN: 978-1-77463-034-1 / eBook ISBN: 9781003184645
\$179.95 US / £139.00.

VOLUME 5: EMERGING TECHNIQUES FOR FOOD PROCESSING, QUALITY, AND SAFETY ASSURANCE

382 pages with index. 12 color and 31 color illustrations.
HB ISBN: 978-1-77463-035-8 / eBook ISBN: 9781003184720
\$179.95 US / £139.00.

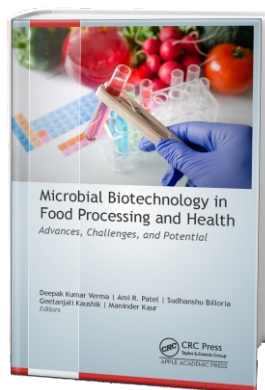
MICROBIAL BIOTECHNOLOGY IN FOOD PROCESSING AND HEALTH

Advances, Challenges, and Potential

Editors: Deepak Kumar Verma,
Indian Institute of Technology
Ami R. Patel, Mansinhbhai Institute of
Dairy & Food Technology, India
With Geetanjali Kaushik, and Maninder Kaur

Discusses the application of microbial biotechnology in food processing to provide nutritional health benefits in foods, focusing on new probiotics and prebiotic-based foods. It provides an informative state-of-the-art perspective of the food industry on probiotics and their metabolites, assesses the specific potential health benefits of probiotics in foods, and presents new research and advances on industrial aspects of microbial food technologies.

397 pages with index. 14 color and 15 b/w illustrations.
HB ISBN: 978-1-77463-728-9 / eBook ISBN: 9781003277415
\$179.95 US / £139.00. August 2022.



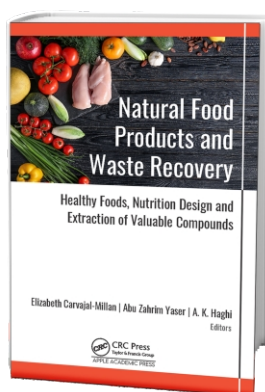
NATURAL FOOD PRODUCTS AND WASTE RECOVERY

Healthy Foods, Nutrition Design, and Extraction of Valuable Compounds

Editors: Elizabeth Carvajal-Millan, Research Center
for Food and Development, Mexico
Abu Zahrim Yaser,
Universiti Malaysia Sabah, Malaysia
With A. K. Haghi

Addresses important issues in the design of functional and nutraceuticals, extraction of essential compounds, and food waste management, including uses and regulations of functional foods and ingredients, supplements, nutraceuticals, and superfoods; informatics and methods in nutrition design and development; and molecular modeling techniques in food and nutrition development. Chapters also cover the use of artificial intelligence and machine learning in food waste management, mitigation, and reuse strategies for food waste.

334 pages with index. 77 b/w illustrations.
HB ISBN: 978-1-77188-981-0 / eBook ISBN: 9781003144748
\$179.95 US / £139.00. July 2021.



NOVEL STRATEGIES TO IMPROVE SHELF-LIFE AND QUALITY OF FOODS

Quality, Safety, and Health Aspects

Editors: Santosh K. Mishra, Guru Angad Dev Veterinary and
Animal Sciences University, India
Megh R. Goyal, University of Puerto Rico

Focuses on food preservation prior to distribution and sale. It provides research on the therapeutic potential of various new and natural compounds along with novel technologies for enhanced shelf-life longevity and food safety. It also looks at the antimicrobial constituents of different sources and the history of their use as biopreservatives.

348 pages with index. 8 color and 13 b/w illustrations.
HB ISBN: 978-1-77188-884-4 / eBook ISBN: 9781003010272
\$189.95 US / £147.00. December 2020.

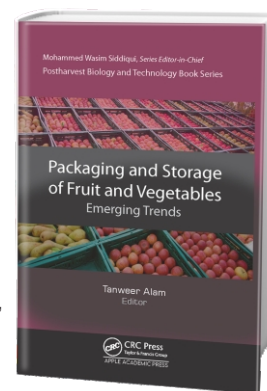
PACKAGING AND STORAGE OF FRUITS AND VEGETABLES

Emerging Trends

Editor: Tanweer Alam,
Indian Institute of Packaging, India

Looks at recent advances in packaging and storage technologies used for quality preservation of fresh fruits and vegetables. Important considerations on selection and characteristics of packaging materials, different recent packaging methods, storage hygiene and sanitation issues along with recent trends in storage technology are discussed.

326 pages with index. 46 b/w illustrations.
HB ISBN: 978-1-77188-987-2 / eBook ISBN: 9781003161165
\$189.95 US / £147.00. December 2021.

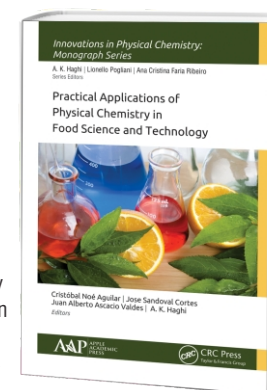


PRACTICAL APPLICATIONS OF PHYSICAL CHEMISTRY IN FOOD SCIENCE AND TECHNOLOGY

Editors: Cristóbal Noé Aguilar, and
José Sandoval-Cortés, Autonomous University
of Coahuila, Mexico
With Juan Alberto Ascacio-Valdés, and A. K. Haghi

Looks at practical applications of physical chemistry in food science and technology, placing emphasis on incorporating sustainable development goals. Discusses nutritional and pharmaceutical properties and analysis, electroanalytical and electrochemical techniques, valorization of food residues, bioactives and bioactivities, separative extraction, microencapsulation, nanoemulsions, agroindustrial waste, and more.

272 pages with index. 5 color and 27 b/w illustrations.
HB ISBN: 978-1-77188-894-3 / eBook ISBN: 9781003020004
\$169.95 US / £131.00. January 2021.



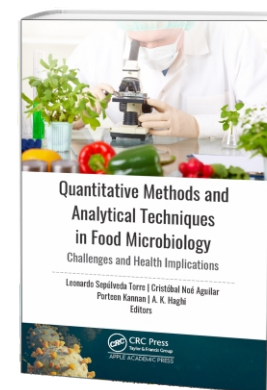
QUANTITATIVE METHODS AND ANALYTICAL TECHNIQUES IN FOOD MICROBIOLOGY

Challenges and Health Implications

Editors: Leonardo Sepúlveda Torre, and
Cristóbal Noé Aguilar,
Universidad Autónoma de Coahuila, México With
Porteen Kannan, and A. K. Haghi

Presents recent developments and new approaches in food microbiology, focusing on microbial food pathogens. The volume presents the fundamental aspects of food and microorganisms, and also addresses food systems and measures to prevent and control food, foodborne diseases, etc. Discusses basic microbiology, safety, pathogenic microorganisms, food conservation, sanitization, and hygiene procedures

288 pages with index. 6 color and 14 b/w illustrations.
HB ISBN: 978-1-77463-726-5 / eBook ISBN: 9781003277453
\$159.95 US / £124.00. July 2022.



HOSPITALITY, TRAVEL & TOURISM

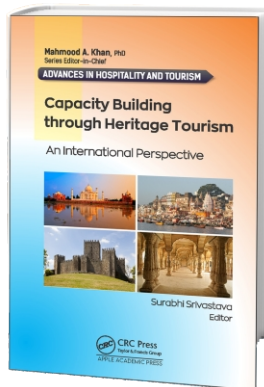
CAPACITY BUILDING THROUGH HERITAGE TOURISM

An International Perspective

Editor: Surabhi Srivastava, College of Kota, India

A comprehensive account of the tangible and intangible benefits of the development of heritage tourism. The book presents nine case studies from international authors that reflect how tourism development is helpful—economically, socially, and otherwise—for community capacity building. It demonstrates the uses of various management strategies and methods for rural and urban areas and cover some of the major topics related to community-based tourism, community capacity building, and community participation in developing heritage tourism.

226 pages with index. 16 color and 10 b/w illustrations.
HB ISBN: 978-1-77188-910-0 / eBook ISBN: 9781003034391
\$159.95 US / £124.00. March 2021.



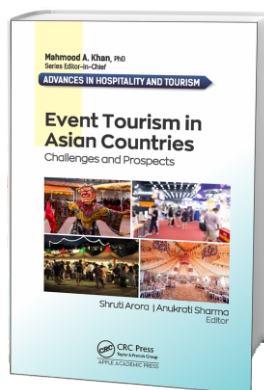
EVENT TOURISM IN ASIAN COUNTRIES

Challenges and Prospects

Editors: Shruti Arora, and Anukrati Sharma, University of Kota, India

Offers a wide variety of research, experience, and examples of events in Asia, including business meetings and conferences; destination weddings; carnivals; food and art festivals; music festivals and concerts; cultural and traditional events; religious and spiritual gatherings; sports events; and more.

428 pages with index.
10 color and 32 b/w illustrations.
HB ISBN: 978-1-77463-004-4 / eBook ISBN: 9781003161134
\$169.95 US / £131.00. March 2022.



FINANCIAL DECISION-MAKING IN THE FOODSERVICE INDUSTRY

Economic Costs and Benefits

Editor: Amit Sharma, Pennsylvania State University

Focuses on cost-benefit analysis, decision-making, behavioral finance, economic theories, and their application in the foodservice and restaurant industry. It synthesizes these major themes by developing new theoretical foundations and presenting findings from the investigation of managerial practice. It discusses ethical obligations in foodservice, sustainability issues in the foodservice/restaurant industry, farm-to-school and local food expenditures in school foodservice settings, managerial traits and behavior in the foodservice industry, and more.

290 pages with index. 15 color and 19 b/w illustrations.
HB ISBN: 978-1-77188-825-7 / eBook ISBN: 9780429292712
\$149.95 US / £116.00. January 2020.

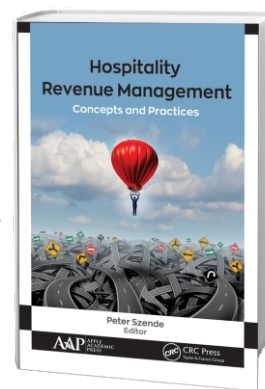
HOSPITALITY REVENUE MANAGEMENT

Concepts and Practices

Editor: Peter Szende, Oxford Brookes University, UK

This textbook provides a comprehensive, in-depth introduction to the basic concepts and best practices of hospitality revenue management. With a real-world, hands-on approach, the book places students in the role of a revenue manager striving to succeed in an ever-changing hospitality business environment. The chapters cover the important topics in hospitality revenue management, including hotel pricing, hotel segmentation, distribution channels, competitive analysis, hotel forecasting, performance analysis, market data, supply and demand management, and more. Examination copies and ancillary materials are available for faculty.

516 pages with index. 49 color illustrations.
HB ISBN: 978-1-77188-888-2 / eBook ISBN: 9781003019923
\$159.95 US / £124.00. November 2020.



MEDICAL TRAVEL BRAND MANAGEMENT

Success Strategies for Hospitality Bridging Healthcare (H2H)

Editors: Frederick J. DeMicco, Pennsylvania State University, USA

Ali A. Poorani, Delaware University, USA

Explores the multitude of medical travel services and discusses the integration of traveling medical guests with destination providers, hospitality/healthcare professionals, and travel service providers. It takes the reader through the critical phases of the medical travel journey: pre-visit, travel, on-site care, discharge and follow-up care. The authors address critical issues facing medical, health, and wellness travel from both macro and micro perspectives. Also addresses the impact the COVID-19 pandemic has made on the travel industry.

466 pages with index. 15 color and 58 b/w illustrations.
HB ISBN: 978-1-77463-727-2 / eBook ISBN: 9781003277392
\$189.95 US / £147.00. August 2022.



THE NATURE AND FUTURE OF TOURISM

A Post-COVID-19 Context

Maximiliano E. Korstanje, University of Palermo, Argentina

Focuses on the tourism industry in conjunction with the impact of COVID-19 from the perspective that it is both negatively impacting the industry while also offering it an opportunity to rise from the ashes. The volume offers a new conceptualization and theorization of tourism, suggests new research methods, offers parallels with other crises (such as 9-11 to better understand the current one, and suggests futurist and innovative strategies.

282 pages with index. 1 b/w illustration.
HB ISBN: 978-1-77463-729-6 / eBook ISBN: 9781003277507
\$159.95 US / £124.00. June 2022.



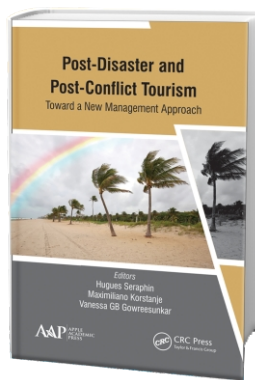
POST-DISASTER AND POST-CONFLICT TOURISM

Toward a New Management Approach

Editors: Hugues Seraphin, University of Winchester Business School, UK
Maximiliano E. Korstanje, University of Palermo, Argentina
With Vanessa GB Gowreesunkar

Presents innovative strategies that could be adopted by post-colonial, post-conflict, and post-disaster destinations to encourage travel and tourism in these areas. Considers tourism as a vehicle toward recovery, educating tourists at the pre-visit stage, post-colonial branding and self-branding, using sports tourism and food events as a marketing strategy, the ethics revolving around post-disaster consumption, and much more.

264 pages with index. 17 b/w illustrations.
HB ISBN: 978-1-77188-814-1 / eBook ISBN: 9780429276224
\$149.95 US / £116.00. January 2020.



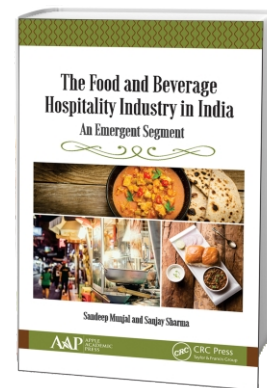
THE FOOD AND BEVERAGE HOSPITALITY INDUSTRY IN INDIA

An Emergent Segment

Sandeep Munjal, Vedatya Institute, India
Sanjay Sharma, School of Culinary Excellence, Vedatya Institute, India

Discusses the growth and change of what is still a largely unorganized food and beverage service industry in India. It provides a holistic perspective of the current performance and identifies the topical issues and the challenges faced by the Indian food and beverage industry.

268 pages with index. 15 color and 49 b/w illustrations.
HB ISBN: 978-1-77188-909-4 / eBook ISBN: 9781003034544
\$159.95 US / £124.00. November 2021.



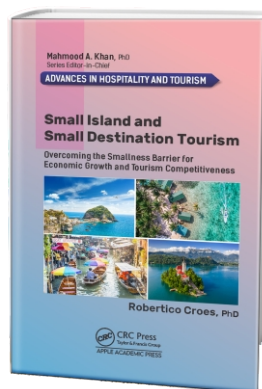
SMALL ISLAND AND SMALL DESTINATION TOURISM

Overcoming the Smallness Barrier for Economic Growth and Tourism Competitiveness

Robertico Croes, University of Central Florida

Examines the phenomenon of why some small island destinations have been more successful than others. The main premise applied is that success and survival of small island tourism hinges on resolving the mystery regarding the relationship between competitiveness and quality of life. In addressing this question, the book reviews four relevant and interconnected concepts: tourism, competitiveness, quality of life, and scale (or size).

277 pages with index. 3 color and 3 b/w illustrations.
HB ISBN: 978-1-77463-723-4 / eBook ISBN: 9781003277477
\$149.95 US / £116.00. July 2022.



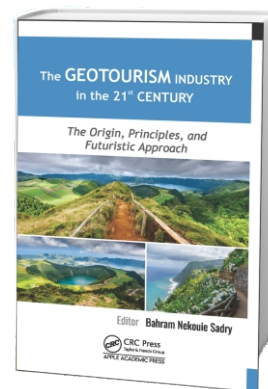
THE GEOTOURISM INDUSTRY IN THE 21ST CENTURY

The Origin, Principles, and Futuristic Approach

Editor: Bahram Nekouie Sadry, Lecturer and Geotourism Consultant

An engaging overview of the development of, definition of, and approach to modern geotourism. It looks at the establishment and effective management of the over 140 UNESCO geoparks around the world and other travel and tourism destinations of interest for their significant historical, cultural, and frequently stunning physical attributes. With studies from a selection of geotourist areas in Poland, Japan, Turkey, Brazil, Albania, California, Mexico, Peru, and other places, the volume explores urban geotourism, mining heritage, geomorphological landforms, geoheritage (based on cultural and historical interest), roadside geology of the U.S., community engagement and volunteer management programs, and much more.

596 pages plus index. 52 color and 111 b/w illustrations.
HB ISBN: 978-1-77188-826-4, eBook ISBN: 9780429292798
\$179.95 US / £139.00. November 2020.



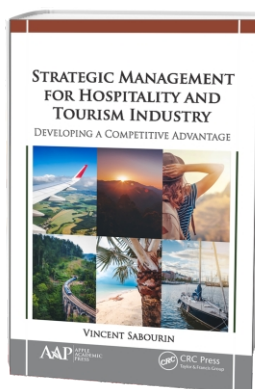
STRATEGIC MANAGEMENT FOR THE HOSPITALITY AND TOURISM INDUSTRY

Developing a Competitive Advantage

Vincent Sabourin, University of Quebec, Canada

Explains cutting-edge theories and views on strategic management in applied management fundamentals in the hospitality and tourism industry. The author discusses the latest in strategic thinking and provides information on implementing models within specific contexts, such as culture and profit and nonprofit organizations. Presents case studies that illustrate the concepts and models discussed, with examples from such heavy weights in the industry as Disney and Euro Disney, Aer Lingus, British Airways, Four Seasons, Holiday Inn, Marriot, Sofitel, Starwood Hotels, and more.

214 pages with index. 11 color and 21 b/w illustrations.
HB ISBN: 978-1-77188-950-6 / eBook ISBN: 9781003105831
\$159.95 US / £124.00. December 2021.



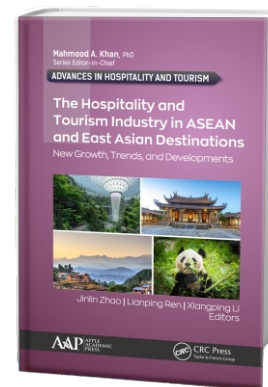
THE HOSPITALITY AND TOURISM INDUSTRY IN ASEAN AND EAST ASIAN DESTINATIONS

New Growth, Trends, and Developments

Editors: Jinlin Zhao, Florida International, USA
Lianping Ren, Macao Institute for Tourism Studies, Macao
With Xiangping Li

Explores the current development of hospitality and tourism industry in the regions of Hong Kong, Macao and Taiwan as well as other key countries in Southeast and South Asia. Chapters cover online marketing strategies, sustainable hospitality development, diversification efforts of the tourism industry, innovations in independent hotels, wildlife tourism in urban destinations, consumers' positive and negative images of certain destinations, more.

322 pages with index. 15 color and 15 b/w illustrations.
HB ISBN: 978-1-77188-942-1 / eBook ISBN: 9781003082200
\$169.95 US / £131.00. July 2021.



Law & Criminal Justice

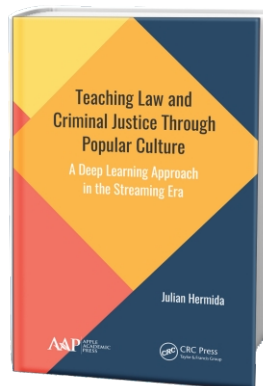
TEACHING LAW AND CRIMINAL JUSTICE THROUGH POPULAR CULTURE

A Deep Learning Approach in the Streaming Era

Julian Hermida, DCL,
Algoma University, Canada

Shows how university and college professors can create an engaging environment that encourages students to take a deep approach to learning using popular culture stories in law school and in criminal justice classrooms. The use of popular culture (films, TV shows, books, songs, etc.) can enhance the deep learning process by helping students develop cognitive skills, competencies, and practices that are essential for the professional practice of law and criminal justice.

214 pages with index. 2 color illustrations.
HB ISBN: 978-1-77188-941-4 / eBook ISBN: 9781003084204
\$139.95 US / £108.00. July 2021.



Library Science

LITERACY AND READING PROGRAMMES FOR CHILDREN AND YOUNG PEOPLE

Case Studies from Around the Globe,
2-volume set:
Volume 1: USA and Europe
Volume 2: Asia, Africa, Australia, and the Middle East

Patrick Lo, University of Tsukuba, Japan
With Stephanie H. S. Wu, Andrew J. Stark, and Bradley Allard

"Highlights the outstanding work that is being done to engage children and young people in literacy and reading through a variety of exciting, innovative and engaging programmes. . . . Engaging, exciting and offers promise of the future of libraries in an increasingly digital world." —Journal of Librarianship and Information Science

"Fascinating personal stories. . . . Important, timely, and valuable. This is a unique and powerful work sure not only to benefit working school, public, and special librarians in expanding their view of what is possible in their practice and providing ideas of how to maximize any situation, but also it is a direct contribution to research and education in librarianship because it captures in-depth scenarios of professional decision making, advocacy building, and learner support that have heretofore been uncollected." —IASL Newsletter

"A treasure trove of inspiring narratives sure to spark rich discussions about global issues facing contemporary school librarians. . . ."
—International Journal of Education and Literacy Studies

Presents interviews with over 40 librarians from around the world who tell of their library programs. It highlights the diversity of the types of programs catering to the varying needs of children and young adults throughout the world. Case studies outline the details of programs, events, and activities provided by over 40 organizations in the context of social capital and social inclusion.

2-VOLUME SET:

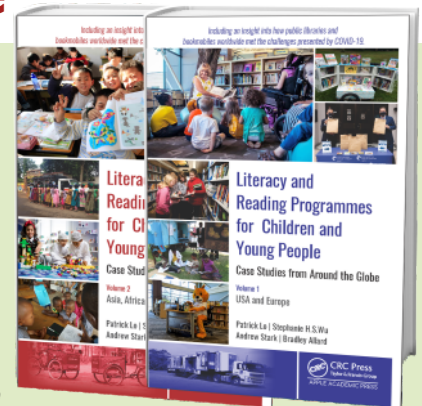
692 pages with index. 156 b/w illustrations.
HB ISBN: 978-1-77463-032-7 / eBook ISBN: 9781003189343
\$299.95 US / £231.00. January 2022.

VOLUME 1: USA AND EUROPE

348 pages with index. 81 b/w illustrations.
HB ISBN: 978-1-77463-030-3 / eBook ISBN: 9781003189268
\$149.95 US / £116.00.

VOLUME 2: ASIA, AFRICA, AUSTRALIA, AND THE MIDDLE EAST

344 pages with index. 75 b/w illustrations.
HB ISBN: 978-1-77463-031-0 / eBook ISBN: 9781003189275
\$149.95 US / £116.00.



ALSO OF INTEREST . . .

EFFECTIVE SCHOOL LIBRARIANSHIP: SUCCESSFUL PROFESSIONAL PRACTICES FROM LIBRARIANS AROUND THE WORLD

(2-volume set)

Volume 1: The Americas and Europe
Volume 2: Africa, Asia, and Australia

Patrick Lo, EdD, Heather Rogers, and Dickson K. W. Chiu, PhD

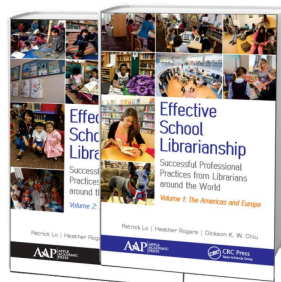
"Offers unique stories of the school librarianship field that are impactful, relevant and stimulating." —The International Education Journal: Comparative Perspectives

"A wonderful way for school librarians and classroom teachers to gain ideas from personal narratives presented by practicing librarians around the world."
—Asian Education and Development Studies

"A fascinating book . . . I specifically commend this book to every library professional's attention, advising them to read as well as delve, to explore and share the ideas and to take the lead by this group of inspirational people. All involved in this publication are to be heartily congratulated."

—Global Comparative Education: Journal of the World Council of Comparative Education Societies

534 pages with index. 69 pages of color illustrations.
HB ISBN: 978-1-77188-656-7 / eBook ISBN: 9781315149578
\$179.95 US / £139.00 UK. 2018



MATERIALS, POLYMER SCIENCE & NANOMATERIALS

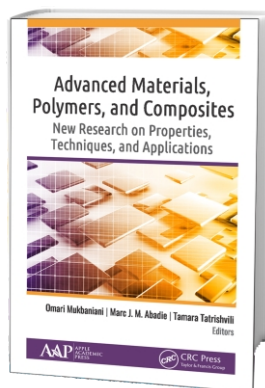
ADVANCED MATERIALS, POLYMERS, AND COMPOSITES

*New Research on Properties,
Techniques, and Applications*

Editors: Omari V. Mukbaniani and Tamara
Tatrishvili,
Ivane Javakhishvili Tbilisi State University, Georgia
With Marc J. M. Abadie

Reviews several domains of polymer science,
especially new trends in polymerization synthesis,
physical-chemical properties, and inorganic
systems. Composites and nanocomposites are also
covered in this book, emphasizing nanotechnologies and their impact on the
enhancement of physical and mechanical properties of these new materials.

458 pages with index. 8 color and 187 b/w illustrations.
HB ISBN: 978-1-77188-951-3 / eBook ISBN: 9781003105015
\$189.95 US / £147.00. November 2021.

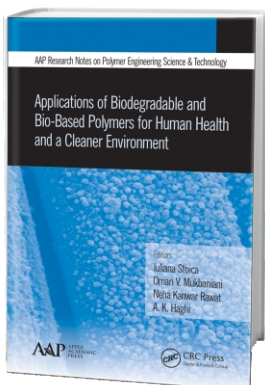


APPLICATIONS OF BIODEGRADABLE AND BIO-BASED POLYMERS FOR HUMAN HEALTH AND A CLEANER ENVIRONMENT

Editors: Iuliana Stoica, "Petru Poni" Institute of
Macromolecular Chemistry, Romania
Omari Mukbaniani, Ivane Javakhishvili Tbilisi State
University, Georgia

With Neha Kanwar Rawat and A. K. Haghi
Provides a technical approach to nonrenewable
fossil fuels and other raw materials that are being depleted and how using green
design and analysis can mitigate the issue.

584 pages with index. 145 b/w illustrations.
HB ISBN: 978-1-77188-976-6 / eBook ISBN: 9781003146360
\$219.95 US / £170.00. December 2021.



APPLIED BIOPOLYMER TECHNOLOGY AND BIOPLASTICS

Sustainable Development by Green Engineering Materials

Neha Kanwar Rawat, CSIR-National Aerospace Laboratories, India
Tatiana G. Volova, Siberian Federal University, Russia
With A. K. Haghi

Discusses many key biopolymer and bioplastic topics and highlights the importance
and impact of eco-friendly green biopolymers and bioplastics, both environmentally
and economically. It provides important insight into the diversity of polymers
obtained directly from, or derived from, renewable resources.

292 pages with index. 50 b/w illustrations.
HB ISBN: 978-1-77188-921-6 / eBook ISBN: 9781003045458
\$189.95 US / £147.00. April 2021.

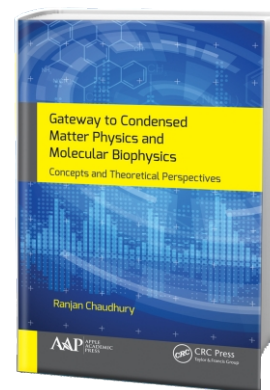
GATEWAY TO CONDENSED MATTER PHYSICS AND MOLECULAR BIOPHYSICS

*Concepts and Theoretical
Perspectives*

Ranjan Chaudhury, Ramakrishna Mission
Vivekananda Educational and
Research Institute, India

Provides the necessary background material and
brings into focus the fundamental concepts
essential for advanced research in theoretical
condensed matter physics and its interface with
molecular biophysics. It is the outcome of the
author's long teaching and research career in theoretical condensed matter physics
and related interdisciplinary fields. Special care has been taken to balance the
physical concepts and mathematical expressions as well as proper mixing of
theoretical and experimental aspects.

458 pages with index. 7 color and 3 b/w illustrations.
HB ISBN: 978-1-77188-913-1 / eBook ISBN: 9781003057840
\$159.95 US / £124.00. December 2021.



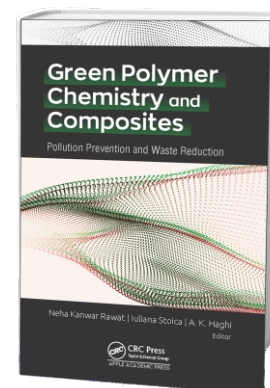
GREEN POLYMER CHEMISTRY AND COMPOSITES

*Pollution Prevention and
Waste Reduction*

Editors: Neha Kanwar Rawat, CSIR-National
Aerospace Laboratories, India
Iuliana Stoica, "Petru Poni" Institute of
Macromolecular Chemistry, Romania
With A. K. Haghi

Examines the latest developments in synthesis,
processing, and technology in the growing field of
producing conventional polymers from sustainable
sources. It illustrates how chemical industries play
an essential role to sustain the world economies and looks at technologies and
scientific developments in novel products, less toxicological materials, and
industrial procedures with high efficiency and renewable energy products.

294 pages with index. 62 b/w illustrations.
HB ISBN: 978-1-77188-937-7 / eBook ISBN: 9781003083917
\$179.95 US / £139.00. May 2021.



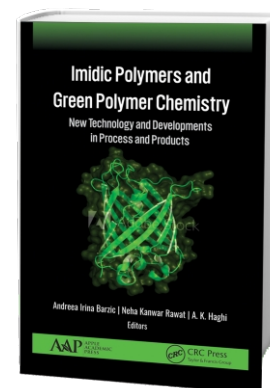
IMIDIC POLYMERS AND GREEN POLYMER CHEMISTRY

*New Technology and Developments in
Process and Product*

Editors: Andreea Irina Barzic, "Petru Poni" Institute of
Macromolecular Chemistry, Romania
Neha Kanwar Rawat, CSIR-National Aerospace
Laboratories, India
with A. K. Haghi

Reviews the latest research, development, and
future potential of polyimides and green polymer
chemistry and explains why polyimides offer versatility unparalleled in comparison
to most other classes of macromolecules.

378 pages with index. 113 b/w illustrations.
HB ISBN: 978-1-77188-903-2 / eBook ISBN: 9781003057918
\$179.95 US / £139.00. March 2021.

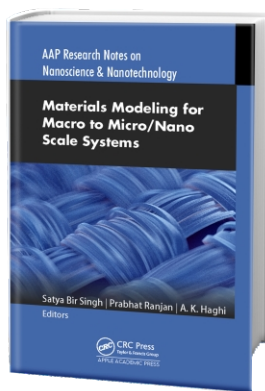


MATERIALS MODELING FOR MACRO TO MICRO/NANO SCALE SYSTEMS

Editors: Satya Bir Singh, Punjabi University, India
Prabhat Ranjan, Manipal University Jaipur, India with
A. K. Haghi

Offers a state-of-the-art report on recent scientific developments in the theory of engineering materials. It addresses the close connection between modeling and experimental methods for studying a wide range of nanomaterials and nanostructures.

310 pages with index. 112 b/w illustrations.
HB ISBN: 978-1-77463-019-8 / eBook ISBN: 9781003180524
\$179.95 US / £139.00. June 2022.

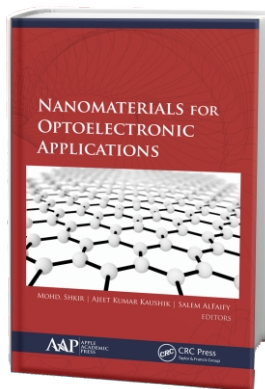


NANOMATERIALS FOR OPTOELECTRONIC APPLICATIONS

Editors: Mohd. Shkir, King Khalid University,
Saudi Arabia
Ajjeet Kumar Kaushik,
Florida Polytechnic University
With Salem AlFaify

Shows the significance and usefulness of nanomaterials for the development of optoelectronic devices and their real-life applications and the role of nanoscale materials in the development of advanced optoelectronic devices at nanoscale. It discusses the applications of nanomaterials in different forms prepared by diverse techniques in the field of optoelectronic and biomedical devices.

314 pages with index. 11 color and 77 b/w illustrations.
HB ISBN: 978-1-77188-940-7 / eBook ISBN: 9781003083948
\$189.95 US / £147.00. September 2021.



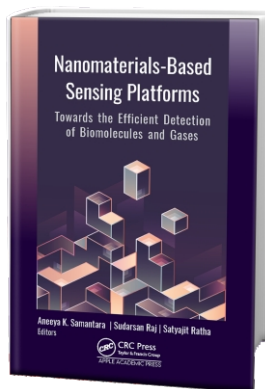
NANOMATERIALS-BASED SENSING PLATFORMS

Towards the Efficient Detection of Biomolecules and Gases

Editors: Aneeya K. Samantara,
National Institute of Science Education and
Research, Bhubaneswar, India
Sudarsan Raj, CSIR-Institute of Minerals and
Materials Technology, India
With Satyajit Ratha

Emphasizes a broad range of biosensing techniques based on optical and electrochemical response methods. Starting from the traditional enzyme-based biosensing method to functionalized nanostructure-based sensors, this book also provides a detailed overview of some of the advanced sensing methodologies based on photonic crystal cavity-based sensing devices.

308 pages with index. 21 color and 67 b/w illustrations.
HB ISBN: 978-1-77463-037-2 / eBook ISBN: 9781003199304
\$159.95 US / £124.00. February 2022.



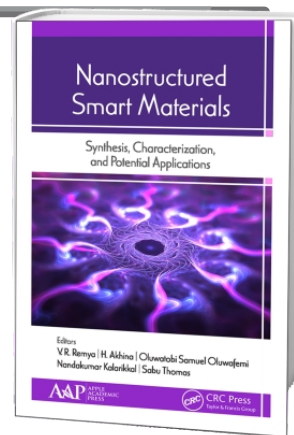
NANOSTRUCTURED SMART MATERIALS

Synthesis, Characterization, and Potential Applications

Editors: V. R. Remya, University of Johannesburg,
South Africa
H. Akhina, Bishop More College, India
With Oluwatobi Samuel Oluwafemi, Nandakumar
Kalarikkal, and Sabu Thomas, FRSC

Presents research on the development of advanced nanomaterials and their composites and blends for different applications in sensing, electrical, biomedical, coating, industrial applications, etc. Includes detailed discussions on the synthesis, properties, processing, and potential applications of nanomaterials and their blends and composites.

322 pages with index. 12 color and 119 b/w illustrations.
HB ISBN: 978-1-77188-974-2 / eBook ISBN: 9781003130468
\$179.95 US / £139.00. July 2021.



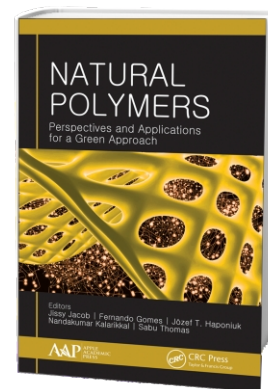
NATURAL POLYMERS

Perspectives and Applications for a Green Approach

Editors: Jissy Jacob,
Mahatma Gandhi University, India
Fernando Gomes, Universidade Federal do Rio de
Janeiro, Brazil
With Józef T. Haponiuk, Nandakumar Kalarikkal,
and Sabu Thomas

Covers the synthesis, characterizations, and properties of natural polymeric systems, including their morphology, structure, and dynamics. It also introduces the most recent innovations and applications of natural polymers and their composites in the food, construction, electronics, biomedical, pharmaceutical, and engineering industries.

336 pages with index. 12 color and 127 b/w illustrations.
HB ISBN: 978-1-77188-960-5 / eBook ISBN: 9781003130765
\$179.95 US / £139.00. March 2022.



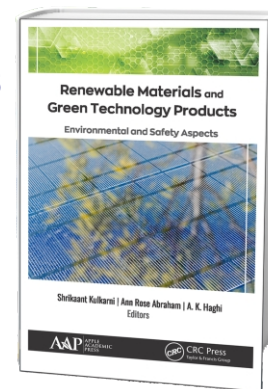
RENEWABLE MATERIALS AND GREEN TECHNOLOGY PRODUCTS

Environmental and Safety Aspects

Editors: Shrikanth Kulkarni, Vishwakarma Institute of
Technology, India
Ann Rose Abraham, Amal Jyothi College of Engineering,
India
with A. K. Haghi

Looks at the design, manufacture, and use of efficient, effective, safe, and more environmentally benign chemical products and processes. It includes a broad range of application-based solutions to the development of renewable materials and green technology.

298 pages with index. 10 color and 23 b/w illustrations.
HB ISBN: 978-1-77188-927-8 / eBook ISBN: 9781003055471
\$169.95 US / £131.00. May 2021.



MATHEMATICS

ADVANCES IN OPTIMIZATION AND LINEAR PROGRAMMING

Ivan Stanimirović University of Niš, Serbia

Provides the information needed to understand the simplex method, the revised simplex method, dual simplex method, and more for solving linear programming problems. Following a logical order, the book first gives a mathematical model of the linear problem programming and describes the usual assumptions under which the problem is solved.

204 pages with index.

HB ISBN: 978-1-77463-740-1 / eBook ISBN: 9781003256052

\$149.95 US / £116.00. January 2022.

MATHEMATICS APPLIED TO ENGINEERING IN ACTION

Advanced Theories, Methods, and Models

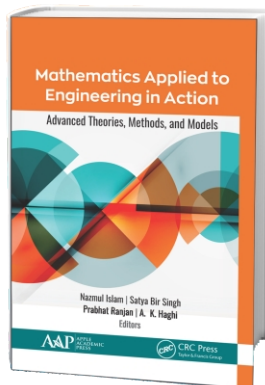
Editors: Nazmul Islam,
Ramgarh Engineering College, India
Satya Bir Singh, Punjabi University, India
with Prabhat Ranjan, and A. K. Haghi

Focuses on material relevant to solving the kinds of mathematical problems regularly confronted by engineers. It explains how an engineer should properly define the physical and mathematical problem statements, choose the computational approach, and solve the problem by a proven reliable approach.

244 pages with index. 45 b/w illustrations.

HB ISBN: 978-1-77188-922-3 / eBook ISBN: 9781003055174

\$169.95 US / £131.00. March 2021.



SPECTRAL THEORY OF MULTIVALUED LINEAR OPERATORS

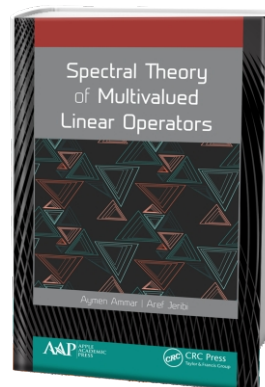
Aymen Ammar, and Aref Jeribi,
University of Sfax, Tunisia

Focuses on the theory of multivalued linear operators, responding to the lack of resources exclusively dealing with the spectral theory of multivalued linear operators. It covers the definitions and characterization of different kinds of spectra and extending the notions of spectra that are considered for the usual one single-valued operator bounded or not bounded. It introduces the theory of pseudospectra of multivalued linear operators. The main topics include demicompact linear relations, essential spectra of linear relation, pseudospectra, and essential pseudospectra of linear relations.

314 pages with index.

HB ISBN: 978-1-77188-966-7 / eBook ISBN: 9781003131120

\$179.95 US / £139.00. September 2021.



For complete contents, prices, and more information, click on the book cover or title.

MECHANICAL ENGINEERING

3D PRINTING TECHNOLOGY AND ITS DIVERSE APPLICATIONS

Editors: H. B. Muralidhara, and Soumitra Banerjee, Jyothy Institute of Technology, India

Explores the exciting and diverse applications of three-dimensional printing in a variety of industries, including food processing, environmental sciences, biotechnology, medical devices, energy storage, civil engineering, textiles and fashion industry, and more.

248 pages with index.
13 color and 29 b/w illustrations.



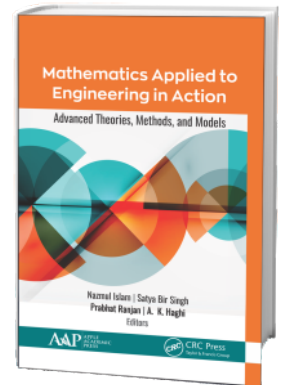
MATHEMATICS APPLIED TO ENGINEERING IN ACTION

Advanced Theories, Methods, and Models

Editors: Nazmul Islam, Ramgarh Engineering College, India
Satya Bir Singh, Punjabi University, Patiala, India
with Prabhat Ranjan, and A. K. Haghi

Focuses on material relevant to solving the kinds of mathematical problems regularly confronted by engineers. It explains how an engineer should properly define the physical and mathematical problem statements, choose the computational approach, and solve the problem by a proven reliable approach. It presents the theoretical background necessary for solving problems, including definitions, rules, formulas, and theorems on the particular theme. The book aims to apply advanced mathematics using real-world problems to illustrate mathematical ideas.

244 pages with index. 45 b/w illustrations.
HB ISBN: 978-1-77188-922-3 / eBook ISBN: 9781003055174
\$169.95 US / £131.00. March 2021.



HB ISBN: 978-1-77188-978-0 / eBook ISBN: 9781003145349
\$159.95 US / £124.00. December 2021.

APPLIED MECHATRONICS AND MECHANICS

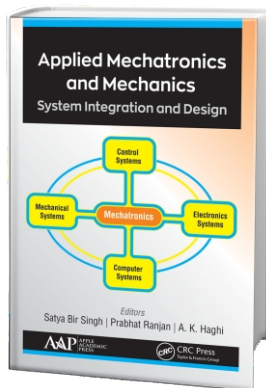
System Integration and Design

Editors: Satya Bir Singh, Punjabi University, India
Prabhat Ranjan, Manipal University Jaipur, India

With A. K. Haghi

Presents a clear and comprehensive introduction to and the latest research and technical notes in the field of mechatronics. It focuses on the application considerations and relevant practical issues that arise in the selection and design of mechatronics components and systems as well..

248 pages with index. 14 color and 94 b/w illustrations.
HB ISBN: 978-1-77188-889-9 / eBook ISBN: 9781003019060
\$169.95 US / £131.00. November 2020.



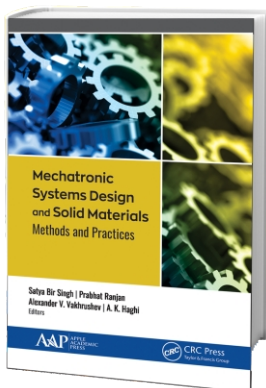
MECHATRONIC SYSTEMS DESIGN AND SOLID MATERIALS

Methods and Practices

Satya Bir Singh, Punjabi University, India
Prabhat Ranjan, Manipal University Jaipur, India
with Alexander V. Vakhrushev and A. K. Haghi

Discusses advanced applications on mechatronics as the synergistic integration of mechanical engineering with electronics and intelligent computer control in the design and manufacturing of industrial products and processes.

270 pages with index.
7 color and 108 b/w illustrations.
HB ISBN: 978-1-77188-915-5 / eBook ISBN: 9781003045748
\$169.95 US / £131.00. May 2021.



For complete contents, prices, and more information, click on the book cover or title.

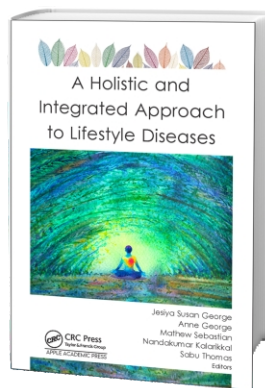
MEDICINAL PLANTS / ALTERNATIVE & COMPLEMENTARY MEDICINE / NUTRACEUTICALS & FUNCTIONAL FOODS

A HOLISTIC AND INTEGRATED APPROACH TO LIFESTYLE DISEASES

Editors: Jesiya Susan George,
Mahatma Gandhi University, Kerala, India
Anne George, MD,
Government Medical College, India
With Mathew Sebastian, MD, Nandakumar
Kalarikkal, and Sabu Thomas

Discusses new and innovative holistic approaches to treat contemporary lifestyle diseases such as various types of cancers, health problems due to overnight mobile telephone usage, AIDS, arthritis, and asthma. Topics include medicinal mushrooms in cancer therapy, health risks of mobile phone usage, employing Ayurveda to treat obesity, treating AIDS by using gene therapy and gene editing technology, and more.

349 pages with index. 16 color and 56 b/w illustrations.
HB ISBN: 978-1-77463-014-3 / eBook ISBN: 9781003180609
\$149.95 US / £116.00 January 2022.



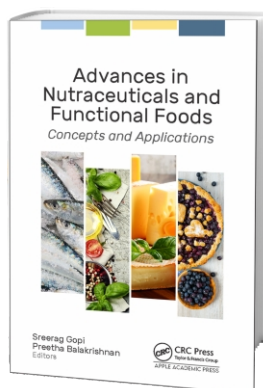
ADVANCES IN NUTRACEUTICALS AND FUNCTIONAL FOODS

Concepts and Applications

Editors: Sreerag Gopi and Preetha Balakrishnan,
ADSO Naturals, India; CureSupport, Netherlands

Examines functional foods in the prevention and management of chronic and infectious diseases. Chapters explore the varied sources, biochemical properties, metabolism, health benefits, and safety of bioactive ingredients for nutraceutical and functional food products. Special emphasis is given to linking the molecular and chemical structures of biologically active components in foods to their nutritional and pharmacological effects on human health and wellness.

388 pages with index. 12 color and 17 b/w illustrations.
HB ISBN: 978-1-77463-752-4 / eBook ISBN: 9781003277088
\$169.95 US / £131.00 July 2022.

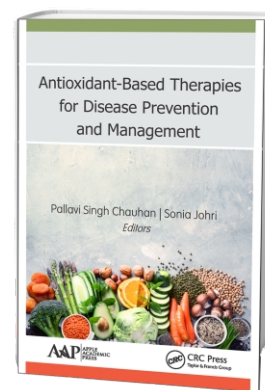


ANTIOXIDANT-BASED THERAPIES FOR DISEASE PREVENTION AND MANAGEMENT

Editors: Pallavi Singh Chauhan, Amity University
Madhya Pradesh, India
Sonia Johri, IITM University, India

Discusses the basic mechanisms of therapy-based oxidative damage and categorization of nutritional antioxidants. It covers the sources of antioxidants as well as their extraction and quantification. It considers the usefulness or disadvantages of antioxidant supplementation in relation to adaptation and performance and also looks at the effectiveness of bioactives and antioxidant-based therapies for specific health issues, such as anemia, infectious diseases, urinary tract infections, Parkinson's diseases, and diabetes.

296 pages with index. 11 color and 39 b/w illustrations.
HB ISBN: 978-1-77188-964-3 / eBook ISBN: 9781003129585
\$169.95 US / £131.00 December 2021.

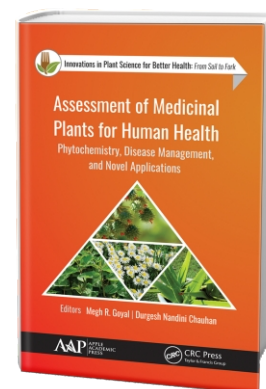


ASSESSMENT OF MEDICINAL PLANTS FOR HUMAN HEALTH Phytochemistry, Disease Management, and Novel Applications

Editors: Megh R. Goyal, University of Puerto Rico
Durgesh Nandini Chauhan, Ishita Research
Organization, India

Looks at importance of medicinal plants and their potential benefits for human health, providing insight with scientific evidence on the use of functional foods in the treatment and management of certain diseases. It covers the assessment and identification, the role of disease management, the ethnobotany and phytochemistry, and novel applications of plants.

288 pages with index. 11 color and 6 b/w illustrations.
HB ISBN: 978-1-77188-857-8, eBook ISBN: 9780429328541
\$169.95 US / £131.00 October 2020.



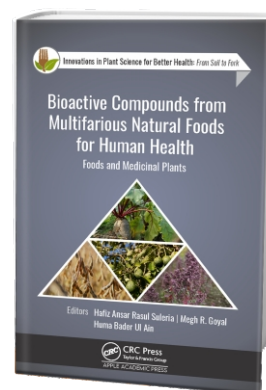
BIOACTIVE COMPOUNDS FROM MULTIFARIOUS NATURAL FOODS FOR HUMAN HEALTH

Foods and Medicinal Plants

Editors: Hafiz Ansar Rasul Suleria, University of
Melbourne, Australia
Megh R. Goyal, University of Puerto Rico
With Huma Bader UI Ain

Covers the various pharmacological and therapeutic aspects of bioactive compounds, along with their methods of extraction, their phytochemistry, their pharmacological and biological activities, their medicinal properties, and their applications for disease management and prevention.

308 pages with index. 9 color and 21 b/w illustrations.
HB ISBN: 978-1-77463-715-9, eBook ISBN: 9781003189763
\$169.95 US / £131.00 June 2022.



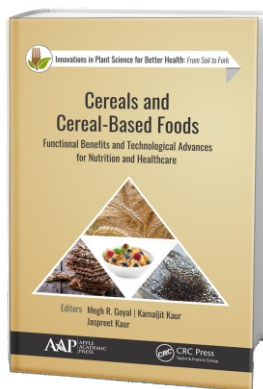
CEREALS AND CEREAL-BASED FOODS

Functional Benefits and Technological Advances for Nutrition and Healthcare

Editors: Megh R. Goyal, University of Puerto Rico
Kamaljit Kaur, Punjab Agricultural University, India
With Jaspreet Kaur

Sheds light on the health benefits of selected cereal grains, processing technologies of cereals, specific roles of bioactive compounds of cereals in chronic disease prevention, and traditional and latest technologies to improve the functional benefits of cereal-based products.

340 pages with index. 4 color and 15 b/w illustrations.
HB ISBN: 978-1-77188-944-5, eBook ISBN: 9781003081975
\$189.95 US / £147.00 July 2021.

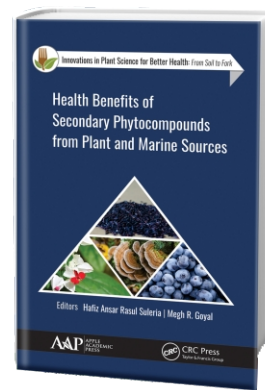


HEALTH BENEFITS OF SECONDARY PHYTOCOMPOUNDS FROM PLANT AND MARINE SOURCES

Editors: Hafiz Ansar Rasul Suleria, University of Melbourne, Australia
Megh Goyal, University of Puerto Rico

Looks at phytochemicals in plant-based therapeutics, covering bioactive compounds from both plant and marine sources. It describes the concept of extraction of bioactive molecules from plant sources, both conventional and modern extraction techniques, and the isolation of potential bioactive molecules from marine sources, their importance, and health perspectives.

326 pages with index. 15 color and 4 b/w illustrations.
HB ISBN: 978-1-77188-898-1, eBook ISBN: 9781003019602
\$169.95 US / £131.00 January 2021.



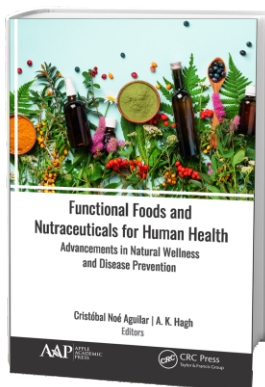
FUNCTIONAL FOODS AND NUTRACEUTICALS FOR HUMAN HEALTH

Advancements in Natural Wellness and Disease Prevention

Editors: Cristóbal Noé Aguilar, Universidad Autónoma de Coahuila, Mexico
with A. K. Hagh

Looks at potential applications and developments in functional health foods and nutraceuticals. Some health issues that are considered in conjunction with these foods and nutraceuticals include oxidative stress, obesity, pharyngitis, low cognitive concentration among others. Research topics include the antioxidant properties of certain products, the development of functional and medicinal beverages, nutraceuticals, and functional foods for alternative therapies, and more.

408 pages with index. 13 color and 30 b/w illustrations.
HB ISBN: 978-1-77188-946-9 / eBook ISBN: 9781003097358
\$189.95 US / £147.00 December 2021.

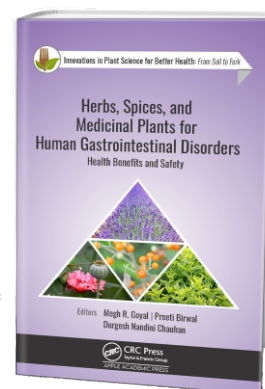


HERBS, SPICES, AND MEDICINAL PLANTS FOR HUMAN GASTROINTESTINAL DISORDERS

Editors: Megh R. Goyal, University of Puerto Rico
Preeti Birwal, Agricultural University, India
With Durgesh Nandini Chauhan

Explores the health claims of plant-based phytochemicals for the treatment and prevention of gastrointestinal disorders. It details the healing benefits of specific spices and herb plant-based remedies, such as garlic, onion, black pepper, aloe vera, Indian gooseberry, chamomile, and dandelion for the treatment of colorectal cancer and hemorrhoids, irritable bowel syndrome, gallstones, celiac disease, peptic ulcers, etc.

288 pages with index.
18 color and 11 b/w illustrations.
HB ISBN: 978-1-77463-714-2, eBook ISBN: 9781003189749
\$159.95 US / £124.00 July 2022.



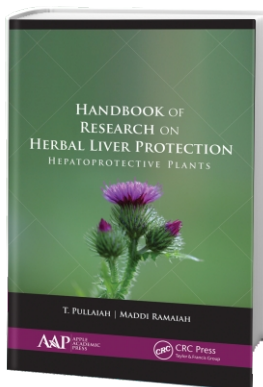
HANDBOOK OF RESEARCH ON HERBAL LIVER PROTECTION

Hepatoprotective Plants

T. Pullaiah, Sri Krishnadevaraya University, India
Maddi Ramaiah, Hindu College of Pharmacy, India

A comprehensive overview of hepatotoxicity and medicinal plants used for protecting the liver and curing liver toxicity and liver diseases. It discusses the medicinal plants screened for hepatoprotection, and the methods of screening are given as well. Methods of assay for screening the medicinal plants are also presented.

812 pages with index.
HB ISBN: 978-1-77188-918-6 / eBook ISBN: 9781003043171
\$249.95 US / £193.00 March 2021.



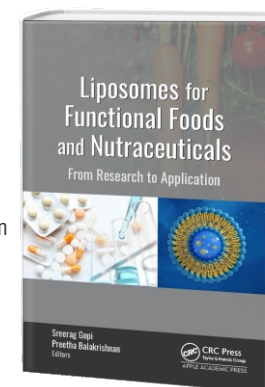
LIPOSOMES FOR FUNCTIONAL FOODS AND NUTRACEUTICALS

From Research to Application

Editors: Sreerag Gopi and Preetha Balakrishnan, ADSO Naturals, India; CureSupport, Netherlands

Discusses the processes and protocols of formation of liposomes and the structures of liposomes produced by different methods and reviews their physico-chemical properties and the science of encapsulation of bioactive compounds using liposomes. It also gives an overview of liposomal methods, protocols, preparation techniques and explores the uses of liposomes as drug carriers but focuses primarily on liposomal carrier systems and technology in bioactive functional foods and nutraceuticals.

289 pages with index. 3 color and 19 b/w illustrations.
HB ISBN: 978-1-77463-754-8 / eBook ISBN: 9781003277361
\$169.95 US / £131.00 July 2022.



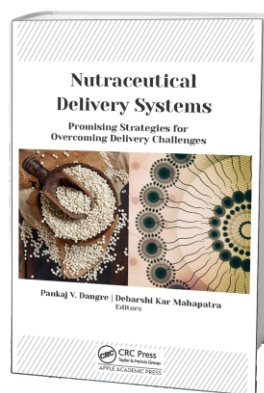
NUTRACEUTICAL DELIVERY SYSTEMS

Promising Strategies for Overcoming Delivery Challenges

Pankaj V. Dangre,
North Maharashtra University, India
Debarshi Kar Mahapatra, Rashtrasant Tukadoji
Maharaj Nagpur University, India

Presents recent research-oriented work on isolation techniques for nutraceutical components, phytosomes, liposomes, solid dispersions, micelles, self-emulsifying drug delivery system (SEDDS), microemulsions, solid lipid nanoparticles (SLNs), polyelectrolyte complexes, oral delivery, polymeric nanoparticles, and more.

450 pages with index. 14 color and 43 b/w illustrations.
HB ISBN: 978-1-77463-716-6 / eBook ISBN: 9781003189671
\$189.95 US / £147.00 July 2022.

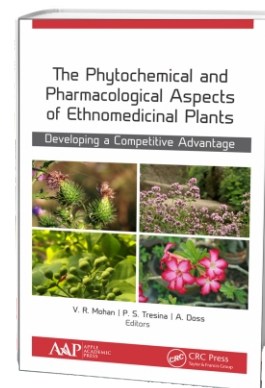


THE PHYTOCHEMICAL AND PHARMACOLOGICAL ASPECTS OF ETHNOMEDICINAL PLANTS

Editors: V. R. Mohan and P. S. Tresina, V.O.
Chidambaram College, India
with A. Doss

Examines the development and characterization of new natural drugs from medicinal plants with the aid of better screening methods. The chapters survey specific medicinal plant species and describe the characteristics of each, how the plants work, and their applications for healthcare.

486 pages with index. 9 color and 51 b/w illustrations.
HB ISBN: 978-1-77188-954-4 / eBook ISBN: 9781003100768
\$229.95 US / £177.00 July 2021.



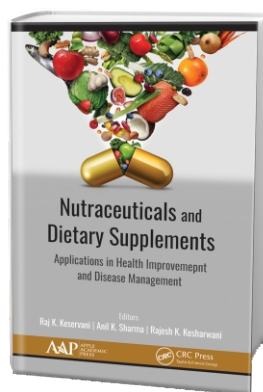
NUTRACEUTICALS AND DIETARY SUPPLEMENTS

Applications in Health Improvement and Disease Management

Editors: Raj K. Keservani, CSM Group of
Institutions, Allahabad, India
Anil K. Sharma, GD Goenka University, India
With Rajesh K. Kesharwani

Presents information on herbal products and their applications. Includes an introduction, the nomenclature, and characteristics of nutraceuticals and goes on to discuss in-depth applications for specific health issues, including cancer, diabetes, Alzheimer's disease, alcoholism, and more. It also looks at the pros and cons as well as the analytical techniques used for the production of nutraceuticals.

342 pages with index. 18 color and 9 b/w illustrations.
HB ISBN: 978-1-77188-873-8 / eBook ISBN: 9780367821517
\$159.95 US / £124.00 November 2020.



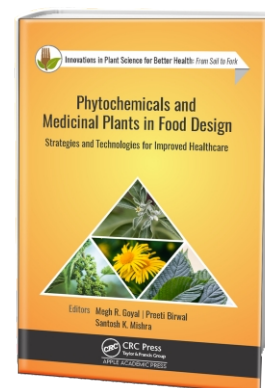
PHYTOCHEMICALS AND MEDICINAL PLANTS IN FOOD DESIGN

Strategies and Technologies for Improved Healthcare

Editors: Megh R. Goyal, University of Puerto Rico
Preeti Birwal, Punjab Agricultural University, India
With Santosh K. Mishra

Explores the therapeutic potential of various natural and novel phytochemicals in the design of new foods. It discusses plant-based secondary metabolites for healthcare, focusing on the health aspects of herbs and medicinal plants and nutraceuticals for livestock production and for the treatment of diseases such as HIV and diabetes and also delves into the design and utilization of healthy foods.

333 pages with index. 13 color and 28 b/w illustrations.
HB ISBN: 978-1-77188-994-0 / eBook ISBN: 9781003150336
\$169.95 US / £131.00 May 2022.



PHYTOCHEMICALS IN FOOD AND HEALTH

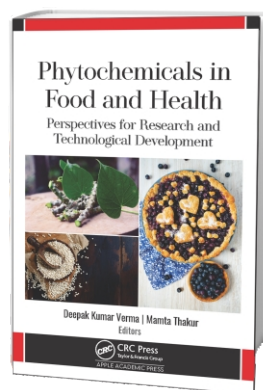
Perspectives for Research and Technological Development

Editors: Deepak Kumar Verma, Indian Institute of
Technology Kharagpur, India
Mamta Thakur, Sant Longowal Institute of
Engineering and Technology, India

Brings together information on the available and newly emerging technologies related to using plant compounds that have a beneficial role in food production.

It focuses on phytochemistry of cereals and legumes, phytochemistry of medicinal plants, and technological advances in phytochemical study.

318 pages with index. 17 color and 34 b/w illustrations.
HB ISBN: 978-1-77188-936-0 / eBook ISBN: 9781003082125
\$189.95 US / £147.00 September 2021.



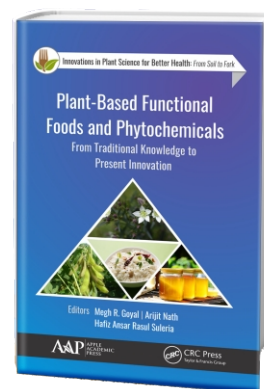
PLANT-BASED FUNCTIONAL FOODS AND PHYTOCHEMICALS

From Traditional Knowledge to Present Innovation

Editors: Megh R. Goyal, University of Puerto Rico
Arijit Nath, Szent István University, Hungary
with Hafiz Ansar Rasul Suleria

Covers the importance of the therapeutic health benefits of phytochemicals derived from plants. It discusses the isolation of potential bioactive molecules from plant sources along with their value to human health. It focuses on physical characteristics, uniqueness, uses, distribution, traditional and nutritional importance, bioactivities, and future trends of different plant-based foods and food products.

378 pages with index. 21 color and 50 b/w illustrations.
HB ISBN: 978-1-77188-929-2 / eBook ISBN: 9781003055419
\$189.95 US / £147.00 March 2021.



NANOSCIENCE & NANOTECHNOLOGY

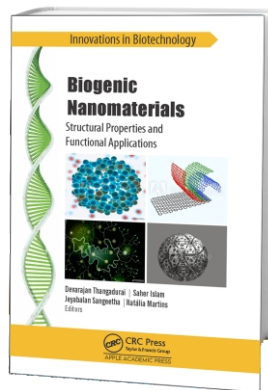
BIOGENIC NANOMATERIALS

Structural Properties and Functional Applications

Devarajan Thangadurai, Karnatak University, India
Saher Islam, University of Veterinary and Animal Sciences, Pakistan

With Jeyabalan Sangeetha and Natália Martins
Presents updated information on the use and applications of nanobiotechnology, starting from a careful characterization and introduction to the various uses of nanoparticles and nanomaterials, their nanomechanical properties in bacteria, and biomedical applications.

302 pages with index. 10 color and 30 b/w illustrations.
HB ISBN: 978-1-77463-838-5 / eBook ISBN: 9781003277149
\$169.95 US / £131.00. August 2022.



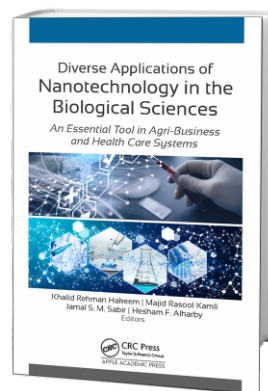
DIVERSE APPLICATIONS OF NANOTECHNOLOGY IN THE BIOLOGICAL SCIENCES

An Essential Tool in Agri-Business and Health Care Systems

Editors: Khalid Rehman Hakeem, King Abdulaziz University, Saudi Arabia
Majid Kamli, Cornell University, New York
With Jamal S. M. Sabir and Hesham F. Alharby

Looking at the diverse applications of nanotechnology in drug delivery, biomedical imaging and medical diagnostics, and healthcare management. The volume emphasizes how nanomedicine can treat different types of cancers and can improve medical imaging for the diagnosis of different kinds of diseases.

422 pages with index. 13 color and 5 b/w illustrations.
HB ISBN: 978-1-77463-840-8 / eBook ISBN: 9781003277255
\$169.95 US / £131.00. August 2022.



THE ERA OF NANOTECHNOLOGY

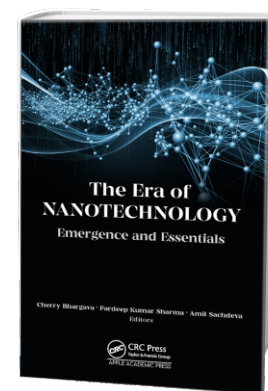
Emergence and Essentials

Editors: Cherry Bhargava and Pardeep Kumar Sharma, Lovely Professional University, India

With Amit Sachdeva

A broad overview of the field of nanotechnology, focusing on key essentials, and delivers examples of applications in various fields. This book targets the future of nanotechnology in various industries and disciplines. It offers basic to advanced level study of the emerging developing and growing nanotechnology field by highlighting the key fundamentals and the application of advanced nanotechnology in real-life applications.

288 pages with index. 69 b/w illustrations.
HB ISBN: 978-1-77188-985-8 / eBook ISBN: 9781003160588
\$169.95 US / £131.00. December 2021.



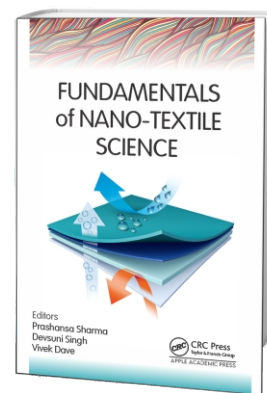
FUNDAMENTALS OF NANO-TEXTILE SCIENCE

Editors: Prashansa Sharma, Banaras Hindu University, India
Devsuni Singh, Banasthali Vidhyapith, India

With Vivek Dave

A detailed overview of advanced nano-textiles methods, techniques, and treatments along with explanations of a wide range of applications. It places emphasis on nanotechnology-based textile enhancements that provide high durability, better affinity, and more functionality in textile materials and that overcome the limitation of conventional processes in the textile industry.

474 pages with index. 13 color and 49 b/w illustrations.
HB ISBN: 978-1-77463-860-6 / eBook ISBN: 9781003277316
\$189.95 US / £147.00. August 2022.



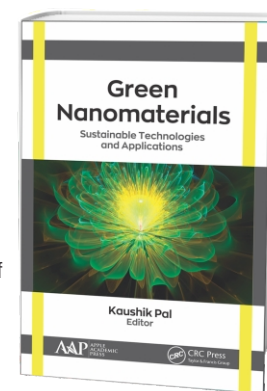
GREEN NANOMATERIALS

Sustainable Technologies and Applications

Editor: Kaushik Pal, Instituto de Macromoléculas, Universidade do Rio de Janeiro, Brazil

Explores eco-friendly technologies in green materials synthesis, taking an inter- and cross-multidisciplinary approach to the green chemistry of nanoengineering and green nanotechnology application in materials research.

254 pages with index.
15 color and 42 b/w illustrations.
HB ISBN: 978-1-77188-965-0 / eBook ISBN: 9781003130314, \$169.95 US / £131.00. February 2022.



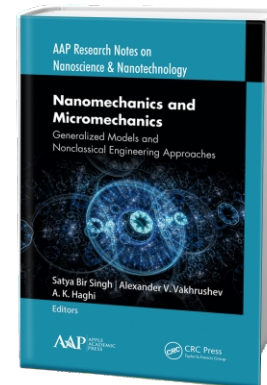
NANOMECHANICS AND MICROMECHANICS

Generalized Models and Nonclassical Engineering Approaches

Editors: Satya Bir Singh, Punjabi University, India
Alexander V. Vakhruшев, Kalashnikov Izhevsk State Technical University, Russia
With A. K. Haghi

Discusses the effective mechanical properties of existing and emerging composites through modeling and design. It integrates various approaches in micromechanics and nanomechanics into a unified mathematical framework, complete with coverage of both linear and nonlinear behaviors.

274 pages with index. 6 color and 95 b/w illustrations.
HB ISBN: 978-1-77188-833-2 / eBook ISBN: 9780429322440
\$159.95 US / £124.00. June 2020.



For complete contents, prices, and more information, click on the book cover or title.

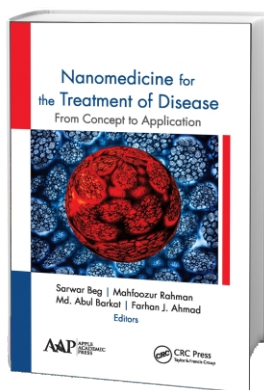
NANOMEDICINE FOR THE TREATMENT OF DISEASE

From Concept to Application

Sarwar Beg, Jubilant Generics Limited, India
Mahfoozur Rahman, Sam Higginbottom University of
Agriculture, Technology & Sciences, India
with Md. Abul Barkat and Farhan Jalees Ahmad

Explores the use nanomedicines for the diagnosis and treatment of a multitude various diseases and health conditions, including respiratory diseases, neurological disorders, genetic diseases, pulmonary fungal infections, neuroAIDS, cardiovascular disorders, gastric and colonic diseases, skin disorders, cancer, brain tumors, leishmaniasis and other visceral diseases, hypertension, and ocular diseases.

562 pages with index. 10 color and 50 b/w illustrations.
HB ISBN: 978-1-77188-767-0 / eBook ISBN: 9780429425714
\$189.95 US / £147.00. June 2019.



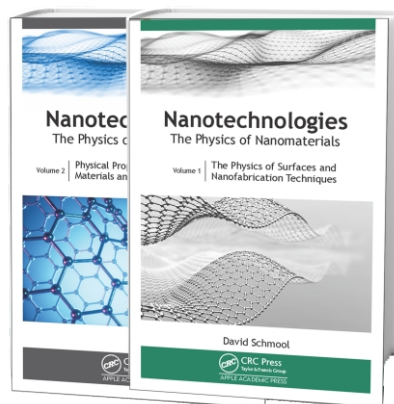
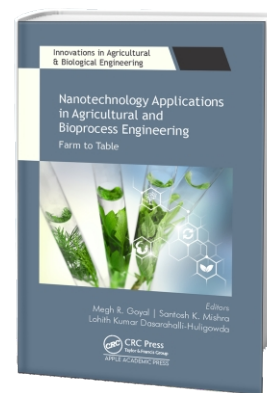
NANOTECHNOLOGY APPLICATIONS IN AGRICULTURAL AND BIOPROCESS ENGINEERING

Farm to Table

Editors: Megh R. Goyal, University of Puerto Rico
Santosh K. Mishra, Guru Angad Dev Veterinary and
Animal Sciences University, India
With Lohith Kumar Dasarahalli-Huligowda

Looks at the current scenario of research and advances of the use of nanotechnology applications in agricultural and bioprocess engineering—in plant growth and nutrition and in the development of food products, nutraceuticals, and therapeutics.

289 pages with index. 11 color and 10 b/w illustrations.
HB ISBN: 978-1-77463-750-0 / eBook ISBN: 9781003277439
\$159.95 US / £124.00. June 2022.



NANOTECHNOLOGIES

The Physics of Nanomaterials

Volume 1: The Physics of Surfaces and Nanofabrication Techniques
Volume 2: Physical Properties of Nanostructured Materials and Their Applications

David Schmool, Université de Versailles/Saint-Quentin, France

A comprehensive guide to the various aspects of nanophysics. The author's microscopic approach illustrates how physical principles can be used to understand the basic properties and functioning of low-dimensional systems. It provides an in-depth introduction to the techniques of production and analysis of materials at the nanoscopic level. These volumes show how limitations of size can give rise to new physical properties and quantum effects, which can be exploited in new applications and devices. Based on a lecture course the author has given over a period of several years.

2-VOLUME SET:

954 pages with index. 19 color and 487 b/w illustrations.
HB ISBN: 978-1-77188-947-6 / eBook ISBN: 9781003100195
\$359.95 US / £277.00. November 2020.

VOLUME 1: THE PHYSICS OF SURFACES AND NANOFABRICATION TECHNIQUES

420 pages with index. 8 color and 242 b/w illustrations.
HB ISBN: 978-1-77188-948-3 / eBook ISBN: 9781003100218
\$189.95 US / £147.00.

VOLUME 2: PHYSICAL PROPERTIES OF NANOSTRUCTURED MATERIALS AND THEIR APPLICATIONS

534 pages with index. 11 color and 245 b/w illustrations.
HB ISBN: 978-1-77188-949-0 / eBook ISBN: 9781003100225
\$189.95 US / £147.00.

ALSO FORTHCOMING IN 2022

Carbon Nanotubes for a Green Environment: Balancing the Risks and Rewards

Editors: Shrikaant Kulkarni, Iuliana Stoica, and A. K. Haghi
Approx. 321 pages with index. 9 color and 32 b/w illustrations
HB ISBN: 978-1-77463-862-0 / eBook ISBN: 9781003277200
\$169.95 US / £131.00 Forthcoming August 2022

Carbon Nanotubes: Functionalization and Potential Applications

Editors: Ann Rose Abraham, Soney C. George, and A. K. Haghi
Approx. 335 pages with index. 10 color and 42 b/w illustrations
HB ISBN: 978-1-77463-857-6 / eBook ISBN: 9781003277194
\$169.95 US / £131.00 Forthcoming May 2022

Low-Dimensional Nanoelectronic Devices: Theoretical Analysis and Cutting-Edge Research

Editors: Angsuman Sarkar, and Arpan Deyasi
Approx. 355 pages with index. 26 color and 108 b/w illustrations
HB ISBN: 978-1-77463-866-8 / eBook ISBN: 9781003277378
\$179.95 US / £139.00 Forthcoming May 2022

Nanotechnology for Environmental Pollution Decontamination: Tools, Methods, and Approaches for Detection and Remediation

Editors: Fernanda Maria Policarpo Tonelli, Rouf Ahmad Bhat, and Gowhar Hamid Dar
Approx. 591 pages with index. 15 color and 52 b/w illustrations
HB ISBN: 978-1-77491-040-5 / eBook ISBN: 9781003279563
\$189.95 US / £147.00 Forthcoming July 2022

Nanotechnology Horizons in Food Process Engineering, 3-volume set: **Volume 1: Food Preservation, Food Packaging and Sustainable Agriculture** **Volume 2: Scope, Biomaterials, and Human Health** **Volume 3: Trends, Nanomaterials, and Food Delivery**

Editor: Megh R. Goyal
Approx. 1314 pages with index. 67 color and 39 b/w illustrations
HB ISBN: 978-1-77491-064-1
\$500 US / £385.00 Forthcoming August 2022

The Science of Nanomaterials: Basics and Applications

Editors: Suresh C. Ameta, and Rakshit Ameta
Approx. 501 pages with index. 8 color and 46 b/w illustrations
HB ISBN: 978-1-77491-072-6 / eBook ISBN: 9781003283126
\$189.95 US / £147.00 Forthcoming August 2022

For complete contents, prices, and more information,
click on the book cover or title.

PHARMACEUTICAL SCIENCE & DRUG DEVELOPMENT

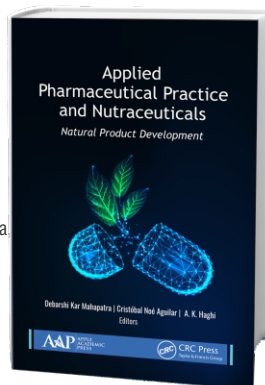
APPLIED PHARMACEUTICAL PRACTICE AND NUTRACEUTICALS

Natural Product Development

Editors: Debarshi Kar Mahapatra, Rashtrasant Tukadoji Maharaj Nagpur University, India
Cristóbal Noé Aguilar, Universidad Autonoma de Coahuila Mexico
with A. K. Haghi

Showcases how pharmaceutical and nutraceutical compounds from natural products can be used to cure or prevent diseases. Chapters cover natural chalcone-based nitric acid inhibitors, pharmacological properties of Emblicanin-A and Emblicanin-B constituents found in *Phyllanthus emblica*, various herbal drugs used for treating helminthiasis (or worm infections) and their pharmacological activities, therapeutic perspectives of medicinal plant for treating psoriasis and skin diseases, and more.

286 pages with index. 68 b/w illustrations.
HB ISBN: 978-1-77188-924-7 / eBook ISBN: 9781003054894
\$169.95 US / £131.00. April 2021.



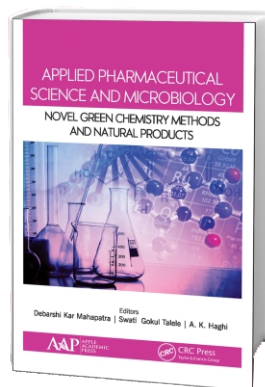
APPLIED PHARMACEUTICAL SCIENCE AND MICROBIOLOGY

Novel Green Chemistry Methods and Natural Products

Editors: Debarshi Kar Mahapatra, Rashtrasant Tukadoji Maharaj Nagpur University, India
Swati Gokul Talele, Sandip Institute of Pharmaceutical Sciences, India
With A. K. Haghi

Presents new research on the applications of natural products for drug uses and covers aspects of green microbial technology in the pharmaceutical industry. Chapters include studies on the applications of natural products used in folk and regional medicines, such as for digestive problems, dermatological infections, respiratory diseases, vessel diseases, diarrhea and dysentery, ringworms, boils, fevers (antipyretic), skin and blood diseases, mouth sores, channel discharges, and even cancer.

246 pages with index. 16 color and 23 b/w illustrations.
HB ISBN: 978-1-77188-891-2 / eBook ISBN: 9871003019565
\$169.95 US / £131.00. December 2020.

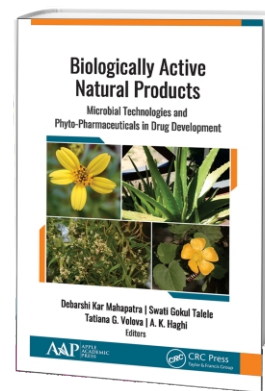


BIOLOGICALLY ACTIVE NATURAL PRODUCTS

Microbial Technologies and Phyto-Pharmaceuticals in Drug Development

Editors: Debarshi Kar Mahapatra, Rashtrasant Tukadoji Maharaj Nagpur University, India
Swati Gokul Talele, Sandip Institute of Pharmaceutical Sciences, India
With Tatiana G. Volova and A. K. Haghi,

Explores biologically active natural products and their use in microbial technologies and as phyto-pharmaceuticals in drug development. It presents detailed scientific principles and recent research on applications of nanotechnology in diagnostics and drug delivery. Topics include pharmacotherapeutically active proteins and peptides; the biotechnological potential of hydrogen-oxidizing bacteria; synthesis and production; synthetic colorants, pigments, dyes, and lakes; and more.
322 pages with index. 69 b/w illustrations.
HB ISBN: 978-1-77188-904-9 / eBook ISBN: 9781003057505
\$179.95 US / £139.00. December 2020.



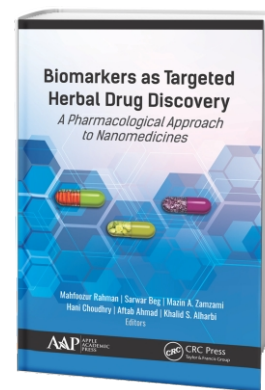
BIOMARKERS AS TARGETED HERBAL DRUG DISCOVERY

A Pharmacological Approach to Nanomedicines

Editors: Mahfoozur Rahman, Higginbottom University of Agriculture, India
Sarwar Beg, Jamia Hamdard (Hamdard University), India
With Mazin A. Zamzami, Hani Choudhry, Aftab Ahmad, and Khalid S. Alharbi

Looks at the applications of biomarkers as important tools for herbal drug discovery, presenting research on phytoconstituents with advanced nanotechnological applications for healthcare benefits. It discusses phytoconstituent-based nanotherapeutics with applications for some specific health issues, such as arthritis, leishmanicidal, cardiovascular diseases, cancer, ocular disorders, etc.

362 pages with index. 14 color and 16 b/w illustrations.
HB ISBN: 978-1-77188-902-5 / eBook ISBN: 9781003045526
\$179.95 US / £139.00. July 2021.



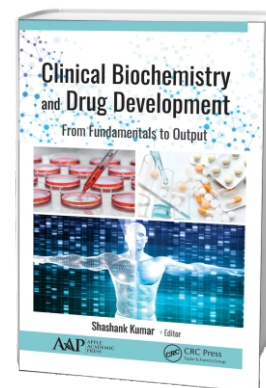
CLINICAL BIOCHEMISTRY AND DRUG DEVELOPMENT

From Fundamentals to Output

Editor: Shashank Kumar,
Central University of Punjab, India

Focuses on clinical biochemistry fundamentals, cell culture techniques, and drug discovery and development concepts. It deals with three different fields of clinical research: cell culture, clinical biochemistry, and drug discovery and development.

264 pages with index.
20 color and 6 b/w illustrations.
HB ISBN: 978-1-77188-869-1 / eBook ISBN: 9780367821470
\$169.95 US / £131.00. November 2020.



For complete contents, prices, and more information, click on the book cover or title.

DRUGS IN PREGNANCY

A Handbook for Pharmacists and Physicians

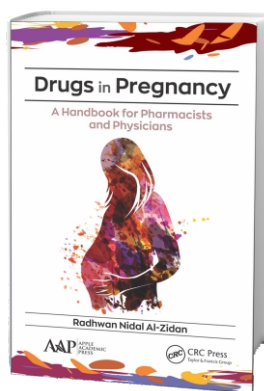
Radhwan Nidal Al-Zidan, Mosul University, Iraq

This first-of-its-kind handbook offers crucial information on the safety of drugs taken during pregnancy. It covers an exhaustive list of common and less common drugs and provides for each drug the FDA letter categorization and newly approved "Pregnancy and Lactation Labeling Rule (PLLR)" systems for rating drug risks in pregnancy, imposed by the U.S. Food and Drug Administration (FDA).

464 pages with index.

HB ISBN: 978-1-77188-895-0 / eBook ISBN: 9781003019107

\$179.95 US / £139.00. June 2020.



METASTATIC DISEASES

Novel Approaches in Diagnosis and Therapeutic Management

Editor: Sandeep Arora, Chitkara University, Punjab, India

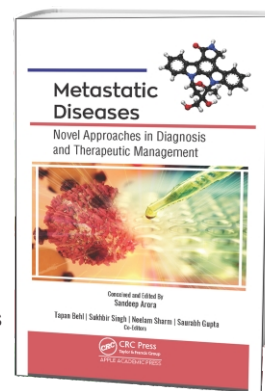
with Tapan Behl, Sukhbir Singh, Neelam Sharma, and Saurabh Gupta,

Opens new horizons for exploring modern therapeutic entities and emerging targets for combating the deadly disease of cancer. The authors provide a review of cancer along with descriptions of its molecular level mechanisms and emphasize the role of promising new therapies, including herbal therapies that can be utilized for the treatment of metastatic diseases.

316 pages with index. 10 color and 46 b/w illustrations.

HB ISBN: 978-1-77188-917-9 / eBook ISBN: 9781003043249

\$169.95 US / £131.00. November 2021.



HANDBOOK OF RESEARCH ON NANO-DRUG DELIVERY AND TISSUE ENGINEERING

Guide to Strengthening Healthcare Systems

Editors: Raji Rajkumari and Hanna J. Maria, International and Inter University Centre for Nanoscience and Nanotechnology, Mahatma Gandhi University, India

With Sabu Thomas and Nandakumar Kalarikkal,

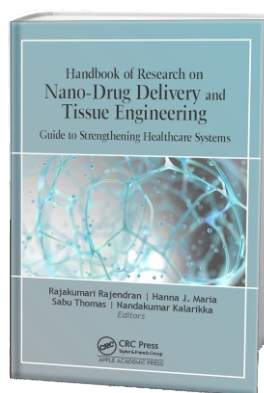
Valuable reports on research accomplishments in nanomedicine, drug delivery, tissue engineering, processing, formulations, and their applications. It provides an up-to-date record on the major findings and observations in the field of nanomedicine and tissue engineering.

Divided into two parts, the book addresses topical issues in nano-drug delivery and nanotechnological approaches to tissue engineering.

600 pages with index. 14 color and 151 b/w illustrations.

HB ISBN: 978-1-77188-984-1 / eBook ISBN: 9781003161196

\$249.95 US / £193.00. October 2021.



NATURAL PHARMACEUTICALS AND GREEN MICROBIAL TECHNOLOGY

Health Promotion and Disease Prevention

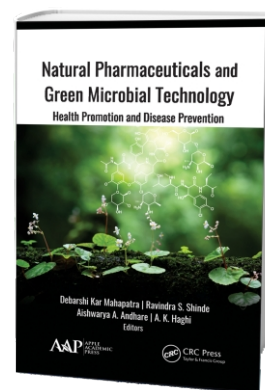
Editors: Debarshi Kar Mahapatra, Rashtrasant Tukadoji Maharaj Nagpur University, India
Ravindra S. Shinde, Dayanand Science College, India
with Aishwarya A. Andhare and A. K. Haghi,

Presents in-depth examination of the chemical and biological properties of selected natural products that are either currently used or have the potential for useful applications in the chemical and pharmaceutical industries. It covers emerging technologies and case studies and is a source of up-to-date information on natural products and microbial technology.

298 pages with index. 10 color and 88 b/w illustrations.

HB ISBN: 978-1-77188-881-3 / eBook ISBN: 9781003003229

\$169.95 US / £131.00. February 2021.



HERBAL PRODUCT DEVELOPMENT

Formulation and Applications

Editors: Anil K. Sharma, GD Goenka University, India

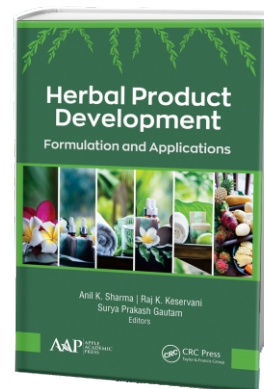
Raj K. Keservani, CSM Group of Institutions, India
With Surya Prakash Gautam

Addresses the challenges that hinder the path of successful natural products from laboratory to market and offers up-to-date information that describes characteristics of herbs and herbal products, applications, evaluation techniques, and more. There is also a section dedicated to alternative medicinal strategies for the treatment and cure of diverse diseases.

376 pages with index. 14 color and 16 b/w illustrations.

HB ISBN: 978-1-77188-877-6, eBook ISBN: 9781003003182

\$169.95 US / £131.00. November 2020.



NATURAL PRODUCTS PHARMACOLOGY AND PHYTOCHEMICALS FOR HEALTH CARE

Methods and Principles in Medicinal Chemistry

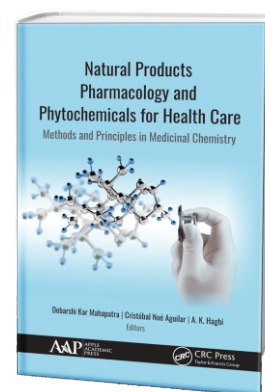
Editors: Debarshi Kar Mahapatra, Rashtrasant Tukadoji Maharaj Nagpur University, India
Cristóbal Noé Aguilar, Universidad Autonoma de Coahuila, Mexico
With A. K. Haghi

Explores the research, discovery, and characterization of chemicals that exhibit biological effects. Providing an informative compilation of research, valuable case studies, and review of existing literature in the area, the book focuses on the ethnobotanical uses of natural products and phytochemicals for health care, including applications for diabetes, ulcers, wound healing, chronic alcoholism, hemorrhoidal treatment, cancer mitigation, pain management, immunotherapy, and more.

278 pages with index. 15 color and 38 b/w illustrations.

HB ISBN: 978-1-77188-901-8 / eBook ISBN: 9781003057932

\$179.95 US / £139.00. February 2021.



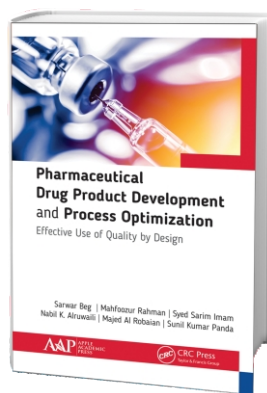
PHARMACEUTICAL DRUG PRODUCT DEVELOPMENT AND PROCESS OPTIMIZATION

Effective Use of Quality by Design

Editors: Sarwar Beg,
Jamia Hamdard University, India
Mahfoozur Rahman, Sam Higginbottom University of
Agriculture, Technology & Sciences, India
With Syed Sarim Imam, Nabil K. Alruwaili, Majed Al
Robaian, and Sunil K. Panda,

Explores the Quality by Design (QbD) concept, which was instituted to focus on the systematic development of drug products with predefined objectives to provide enhanced product and process understanding. It presents and discusses the vital precepts underlying the efficient, effective, and cost-effective development of pharmaceutical drug products.

382 pages with index. 24 color and 30 b/w illustrations.
HB ISBN: 978-1-77188-872-1 / eBook ISBN: 9780367821678
\$169.95 US / £131.00. April 2020.



ALSO FORTHCOMING IN 2022

Antidiabetic Plants for Drug Discovery: Pharmacology, Secondary Metabolite Profiling, and Ingredients with Insulin Mimetic Activity

Editors: Deepu Pandita, Anu Pandita, and Chander Bhanu
Approx. 319 pages with index. 9 color and 24 b/w illustrations
HB ISBN: 978-1-77491-006-1 / eBook ISBN: 9781003282938
\$179.95 US / £139.00 Forthcoming June 2022

Bioactive-Loaded Nanomedicine for the Management of Health and Disease

Editors: Mahfoozur Rahman, Sarwar Beg, Khalid S. Alharbi,
Waleed Hassan Almalki, Nabil K. Alruwaili, and Majed Al Robaian
Approx. 398 pages with index. 13 color and 30 b/w illustrations
HB ISBN: 978-1-77463-993-1 / eBook ISBN: 9781003277101
\$179.95 US / £139.00 Forthcoming May 2022

Bioactives and Pharmacology of Legumes

Editor: T. Pullaiah
Approx. 566 pages with index. 6 color and 46 b/w illustrations
HB ISBN: 978-1-77491-126-6
\$199.95 US / £154.00 Forthcoming September 2022

Biologically Active Small Molecules: Modern Applications and Therapeutic Perspectives

Editors: Debarshi Kar Mahapatra, and Sanjay Kumar Bharti
Approx. 368 pages with index. 8 color and 37 b/w illustrations
HB ISBN: 978-1-77491-068-9 / eBook ISBN: 9781003283119
\$179.95 US / £139.00 Forthcoming August 2022

Biomolecules and Pharmacology of Medicinal Plants, 2-volume set

Editor: T. Pullaiah
Approx. 1090 pages with index. 16 color and 86 b/w illustrations
HB ISBN: 978-1-77491-076-4 / eBook ISBN: 9781003284475
Forthcoming August 2022

Therapeutic Platform of Bioactive Lipids: Focus on Cancer

Editor: Manjari Singh
Approx. 301 pages with index. 14 color and 59 b/w illustrations
HB ISBN: 978-1-77491-084-9 / eBook ISBN: 9781003301608
\$169.95 US / £131.00 Forthcoming August 2022

Topical and Transdermal Drug Delivery Systems: Applications and Future Prospects

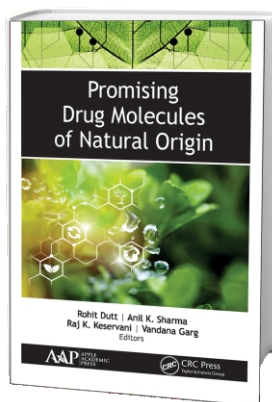
Editors: Nayan A. Gujarathi, Juliana Palma Abriata Barcellos, Raj K. Keservani,
and Anil K. Sharma
Approx. 301 pages with index. 7 color and 15 b/w illustrations
HB ISBN: 978-1-77491-070-2 / eBook ISBN: 9781003284017
\$169.95 US / £131.00 Forthcoming August 2022

PROMISING DRUG MOLECULES OF NATURAL ORIGIN

Rohit Dutt, GD Goenka University, India
Anil K. Sharma, GD Goenka University, India
with Raj K. Keservani and Vandana Garg,

Explores potential beneficial drug substances derived from nature. It presents the general principles, characteristics, evaluation techniques, and applications involved in drug molecules from natural sources, such as plants and marine life.

480 pages with index.
5 color and 65 b/w illustrations.
HB ISBN: 978-1-77188-886-8 / e
Book ISBN: 9781003010395
\$189.95 US / £147.00. November 2020.

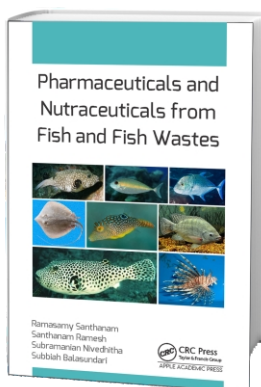


PHARMACEUTICALS AND NUTRACEUTICALS FROM FISH AND FISH WASTES

Ramasamy Santhanam, Fisheries College and
Research Institute, Tamilnadu Veterinary and Animal
Sciences University, India
Santhanam Ramesh, Ratnam Institute of Pharmacy
Nellore, India
With Subramanian Nivedhitha, and
Subbiah Balasundari

Relays important aspects on the pharmaceutical and nutraceutical values of 175 species of bony and cartilaginous fishes as well as the uses of fish processing byproducts and wastes. Presented in an easy-to-read style, it provides precise identification of freshwater and marine fishes possessing pharmaceutical and nutraceutical compounds along with over 180 photographs. Aspects covered include biology, ecology, diagnostic features, and pharmaceutical and nutraceutical compounds along with their activities for each of the fish included.

254 pages with index. 180 b/w illustrations.
HB ISBN: 978-1-77463-010-5 / eBook ISBN: 9781003180548
\$159.95 US / £124.00. April 2021.



For complete contents, prices, and more information,
click on the book cover or title.

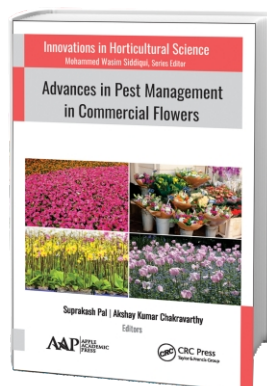
PLANT SCIENCE & BOTANY

ADVANCES IN PEST MANAGEMENT IN COMMERCIAL FLOWERS

Editors: Suprakash Pal, North Bengal Agriculture University, India
Akshay Kumar Chakravarty, Indian Institute of Horticultural Research, India

An informative overview of worldwide pests of important commercial flowers. It explores the role of climate change and the synthetic chemicals and their possible harmful effects on the environment. It goes on to offer novel research on management of pest problems in commercial flower production, discussing eco-friendly techniques, the use of new and promising chemicals, the employment of indigenous technical knowledge, and more.

304 pages with index. 8 color and 51 b/w illustrations.
HB ISBN: 978-1-77188-817-2 / eBook ISBN: 9780429284120
\$179.95 US / £139.00. February 2020.



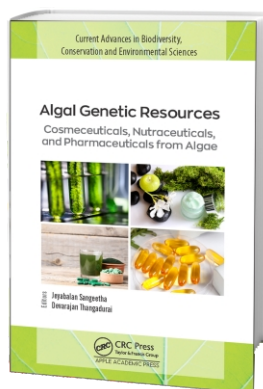
ALGAL GENETIC RESOURCES

Cosmeceuticals, Nutraceuticals, and Pharmaceuticals from Algae

Editors: Jayabalan Sangeetha, Central University of Kerala, India
Devarajan Thangadurai, Karnatak University, India

Focuses on recent and advanced techniques and technologies in algal cultivation and extraction for its application. The chapters discuss the biological importance, properties, and uses of algal metabolites and microalgae-based compounds in drug development, in food nutrition enhancement, and in the development of cosmetics with medicinal properties.

291 pages with index. 13 color and 2 b/w illustrations.
HB ISBN: 978-1-77463-748-7 / eBook ISBN: 9781003277095
\$159.95 US / £124.00. August 2022.



BIOACTIVE COMPOUNDS FROM PLANT ORIGIN

Extraction, Applications, and Potential Health Benefits

Editors: Hafiz Ansar Rasul Suleria, The University of Melbourne, Australia
Colin Barrow, Deakin University, Australia

Explores the importance of phytochemicals from plants in therapeutics and human health, focusing on the extraction of bioactive compounds and their applications in human health. It describes recent advances as enzyme-assisted, microwave-assisted, ultrasound-assisted, pressurized liquid extraction, and supercritical extraction techniques. It also covers the roles of different bioactive compounds and their health-promoting potential for lifestyle diseases.

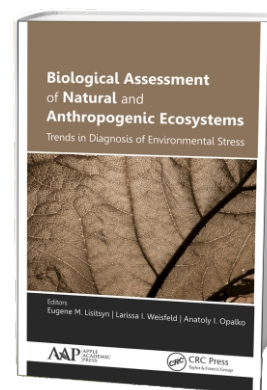
336 pages with index. 10 color and 30 b/w illustrations.
HB ISBN: 978-1-77188-786-1 / eBook ISBN: 9780429029288
\$159.95 US / £124.00. October 2019.

BIOLOGICAL ASSESSMENT OF NATURAL AND ANTHROPOGENIC ECOSYSTEMS

Trends in Diagnosis of Environmental Stress

Editors: Eugene M. Lisitsyn and Larissa I. Weisfeld, Russian Academy of Sciences, Russia
With Anatoly I. Opalko

Looks at the application of certain criteria (biochemical, morphological, anatomical, and genetic) and discusses methodological approaches to indicate environmental problems. The book explores new scientific research and practical applications of bioindicators for both nature protection and scientific research purposes. 306 pages with index. 6 color and 26 b/w illustrations.
HB ISBN: 978-1-77188-977-3 / eBook ISBN: 9781003145424
\$159.95 US / £124.00. December 2021.



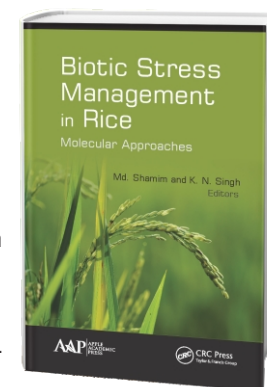
BIOTIC STRESS MANAGEMENT IN TOMATO

Biotechnological Approaches

Editors: Shashank Shekhar Solankey, Kishanganj under Bihar Agricultural University, India
Md. Shamim, Bihar Agricultural University, India

Highlights biotechnological tools and their utilization for biotic stress management in the tomato plant, covering the major diseases of tomato along with practical biotic stress management strategies through biotechnological and molecular approaches. The focus is on molecular tools that can be used to prevent or mitigate damage.

322 pages with index. 9 color and 12 b/w illustrations.
HB ISBN: 978-1-77463-040-2 / eBook ISBN: 9781003186960
\$179.95 US / £139.00. November 2021.

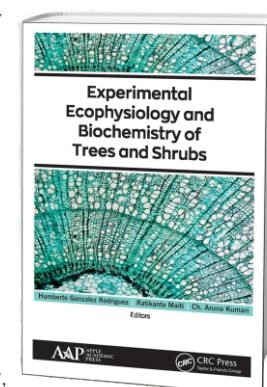


EXPERIMENTAL ECOPHYSIOLOGY AND BIOCHEMISTRY OF TREES AND SHRUBS

Humberto González Rodríguez and Ratikanta Maiti, Autonomous University of Nuevo Leon, Mexico
With Ch. Aruna Kumari

Deals with various aspects of experimental ecophysiology of trees and shrubs along with recent research results of studies on plant pigment, epicuticular wax, leaf nutrients, carbon fixation, all supported by literature. It also describes laboratory techniques such as diffusion, imbibition, calorimetry, atomic absorption, mineral nutrition, nutrition analysis of forage, litterfall chemistry, nutrient cycle, etc.

344 pages with index. 13 b/w illustrations.
HB ISBN: 978-1-77188-837-0 / eBook ISBN: 9780429322266
\$159.95 US / £124.00. November 2020.

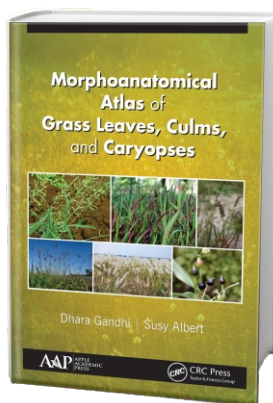


MORPHOANATOMICAL ATLAS OF GRASS LEAVES, CULMS, AND CARYOPSES

Dhara Gandhi and Susy Albert, Maharaja Sayajirao University of Baroda, India

Features the studied anatomical details of different parts of 100 wild grass species and provides a comprehensive overview of existing knowledge. Each of the three sections of the volume (leaves of grass, culms, and caryopses) discusses and illustrates the diagnostic histological features, along with statistical analyses on the quantitative and qualitative data.

656 pages with index. 6 color and 231 b/w illustrations.
HB ISBN: 978-1-77188-848-6 / eBook ISBN: 9780429328084
\$199.95 US / £154.00. November 2020.



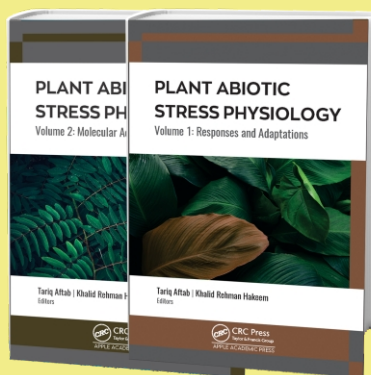
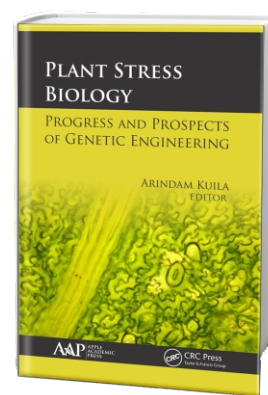
PLANT STRESS BIOLOGY

Progress and Prospects of Genetic Engineering

Editor: Arindam Kuila, Banasthali Vidyapith, India

Covers the molecular aspects of plant stress and the various industrial applications. Chapters cover the biology of plant stress, including morphological and physiological changes of plants due to accumulation of pollutants; the types of stress for enhanced biofuel production from plant biomass; plant adaptation due to different types of environmental stresses; potential applications of microRNAs to improve abiotic stress tolerance in plants; plant resistance to viruses and the molecular aspects; photosynthesis under stress conditions; plant responses to weeds, pests, pathogens, and agricultural stress conditions; and plant responses under the stress of drought.

362 pages with index. 13 color and 18 b/w illustrations.
HB ISBN: 978-1-77188-925-4 / eBook ISBN: 9781003055358
\$179.95 US / £139.00. December 2020.



PLANT ABIOTIC STRESS PHYSIOLOGY, 2-VOLUME SET

Volume 1: Responses and Adaptations
Volume 2: Molecular Advancements

Editors: Tariq Aftab, Aligarh Muslim University, India
Khalid Rehman Hakeem, King Abdulaziz University, Saudi Arabia

Highlights the various innovative and emerging techniques and molecular applications that are currently being used in plant abiotic stress physiology. Volume 1 focuses on the responses and adaptations of plants to stress factors at the cellular and molecular levels and offers a variety of advanced management strategies and technologies. Volume 2 introduces a range of state-of-the-art molecular advances for the mitigation of abiotic stress in plants.

2-VOLUME SET:

748 pages. 9 color and 39 b/w illustrations.
HB ISBN: 978-1-77463-016-7 / eBook ISBN: 9781003180555
\$339.95 US / £262.00 UK. February 2022.

VOLUME 1: RESPONSES AND ADAPTATIONS

426 pages with index. 5 color and 23 b/w illustrations.
HB ISBN: 978-1-77463-017-4 / eBook ISBN: 9781003180562
\$169.95 US / £131.00.

VOLUME 2: MOLECULAR ADVANCEMENTS

322 pages with index. 4 color and 16 b/w illustrations.
HB ISBN: 978-1-77463-018-1 / eBook ISBN: 9781003180579
\$169.95 US / £131.00.

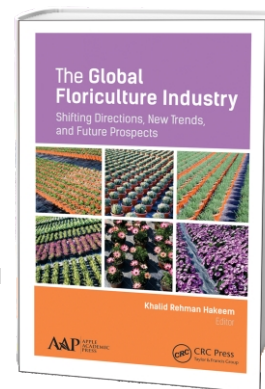
THE GLOBAL FLORICULTURE INDUSTRY

Shifting Directions, New Trends, and Future Prospects

Editor: Khalid Rehman Hakeem, King Abdulaziz University, Saudi Arabia

Presents research trends and areas of improvement to benefit the floriculture industry and to understand future directions and prospects. It also looks at the role of plants in stabilizing the environment and the use of scientific knowledge through research that has changed the perspective of modern floriculture.

168 pages with index. 13 color illustrations.
HB ISBN: 978-1-77188-878-3 / eBook ISBN: 9781003000723
\$159.95 US / £124.00. November 2020.



For complete contents, prices, and more information, click on the book cover or title.

PSYCHOLOGY, PSYCHIATRY & MENTAL HEALTH

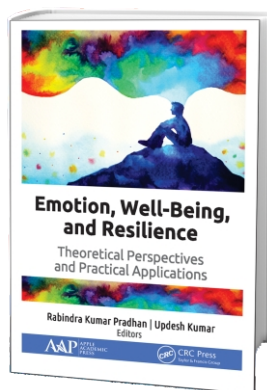
EMOTION, WELL-BEING, AND RESILIENCE

Theoretical Perspectives and Practical Applications

Editors: Rabindra Kumar Pradhan, Indian Institute of Technology, India
Updesh Kumar, Defense Institute of Psychological Research R & D Organization, India

Discusses the role of emotion, resilience, and well-being in many contexts of human life, including home, school, and workplace. Leading researchers and academicians from around the world explore the theoretical and practical implications of many studies in this area. They present new concepts, models, and knowledge for practical applications that address challenges to well-being.

530 pages with index. 8 color and 11 b/w illustrations.
HB ISBN: 978-1-77188-890-5/ eBook ISBN: 9781003057802
\$199.95 US / £154.00. January 2021.

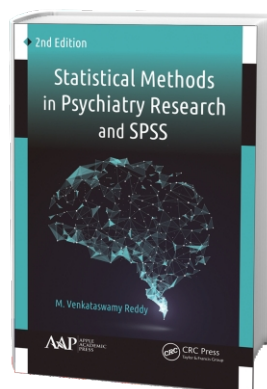


STATISTICAL METHODS IN PSYCHIATRY RESEARCH AND SPSS, 2nd Edition

M. Venkataswamy Reddy, National Institute of Mental Health and Neuro-Sciences, India

Introduces data analysis software and emphasizes the classification of fundamental statistical methods in psychiatry research that are precise and simple. Professionals in the field of mental health and allied subjects without any mathematical background will easily understand all the relevant statistical methods and carry out the analysis and interpret the results in their respective field without the need to consult a statistician. Includes over 100 pages of new material, including several new appendixes.

442 pages with index. 103 b/w illustrations.
HB ISBN: 978-1-77188-781-6 / eBook ISBN: 9780429023309
\$159.95 US / £124.00. January 2019.



OPTICAL & MOLECULAR PHYSICS

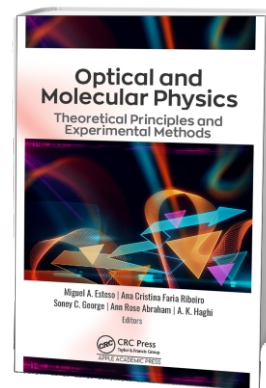
OPTICAL AND MOLECULAR PHYSICS

Theoretical Principles and Experimental Methods

Editors: Miguel A. Esteso, University of Alcalá, Spain
Ana Cristina Faria Ribeiro, University of Coimbra, Portugal
with Soney C. George, Ann Rose Abraham, and A. K. Haghi

The book presents state-of-the-art research in the preparation methods, optical characterization, and usage of optical materials and devices in various photonic fields. It addresses plasmonics and carbon dots physics with applications, optical films, fibers, and materials, optical properties of advanced materials, molecular physics and diffusion, and macromolecular physics. It looks at optical materials in the development of composite materials for the functionalization of glass, ceramic, and polymeric substrates to interact with electromagnetic radiation.

518 pages with index. 101 b/w illustrations.
HB ISBN: 978-1-77188-983-4 / eBook ISBN: 9781003150053
\$229.95 US / £177.00. September 2021.



For complete contents, prices, and more information, click on the book cover or title.

WATER RESOURCES & MANAGEMENT

RESOURCE RECOVERY FROM WASTEWATER

Toward Sustainability

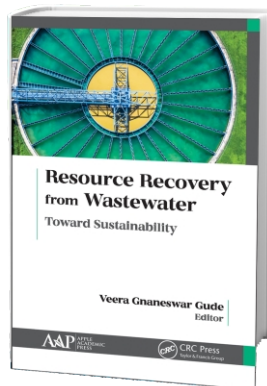
Editor: Veera Ganeswar Gude, Mississippi State University, USA

Provides comprehensive knowledge on various aspects of wastewater resource management from the point of process sustainability and resource recovery. It incorporates the latest developments in pollutant removal and resource recovery methods in wastewater treatment. It highlights advances that have been made in microbiological processes; design of treatment schemes; process configurations; energy conservation and efficiency improvement schemes; nutrient removal; recovery, reclamation, and recycling; beneficial uses of wastewater; and bioenergy and biochemical production from wastewater and sludge streams.

362 pages with index. 14 color and 64 b/w illustrations.

HB ISBN: 978-1-77188-928-5 / eBook ISBN: 9781003055501

\$189.95 US / £147.00. July 2021.



SUSTAINABLE WATER RESOURCE DEVELOPMENT AND MANAGEMENT

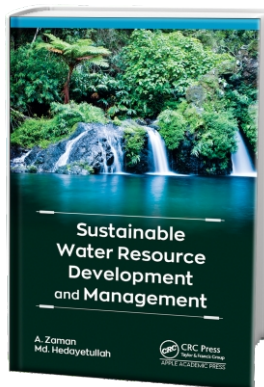
A. Zaman, Sister Nivedita University, India Md. Hedayetullah, Bidhan Chandra Krishi Viswavidyalaya, India

Covers the sources, availability, demand, and supply of water and its uses in irrigation and crop production in agriculture. It then delves into many specific aspects of water resource development and management,

240 pages with index.

HB ISBN: 978-1-77463-.00. 9-9 / eBook ISBN: 9781003180494

\$159.95 US / £124.00. May 2022.



ALSO AVAILABLE IN 2022

Advanced Technologies for Water Quality Treatment and Management

Editors: Mehraj U. Din Dar, Aamir Ishaq Shah, Shakeel Ahmad Bhat, and Syed Rouhullah Ali

Approx. 291 pages with index. 12 color and 37 b/w illustrations

HB ISBN: 978-1-77491-177-8

\$159.95 US / £124.00 Forthcoming October 2022

Advances in Hydrology and Climate Change: Historical Trends and New Approaches in Water Resources Management

Editors: Surendra Kumar Chandniha, Anil Kumar Lohani, Gopal Krishan, and Ajay Krishna Prabhakar

Approx. 487 pages with index. 9 color and 164 b/w illustrations

HB ISBN: 978-1-77491-030-6 / eBook ISBN: 9781003282365

\$189.95 US / £147.00 Forthcoming July 2022

GIScience for the Sustainable Management of Water Resources

Editors: Gowhar Meraj, Shruti Kanga, Majid Farooq, Suraj Kumar Singh, and Sudhanshu

Approx. 454 pages with index. 15 color and 143 b/w illustrations

HB ISBN: 978-1-77491-048-1 / eBook ISBN: 9781003284512

\$179.95 US / £139.00 Forthcoming July 2022

For complete contents, prices, and more information, click on the book cover or title.

WASTE MANAGEMENT

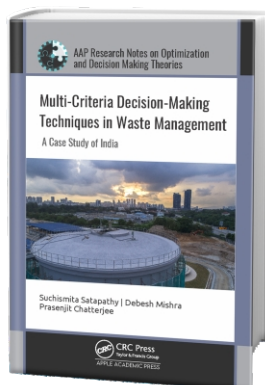
MULTI-CRITERIA DECISION-MAKING TECHNIQUES IN WASTE MANAGEMENT

A Case Study of India

Suchismita Satapathy and Debesh Mishra, KIIT University, India
With Prasanjit Chatterjee

Addresses the problem of waste management by using multi-criteria decision-making methods. It explains how to apply MCDM techniques that utilize various optimization models to rank alternatives, while also incorporating the concerns and needs of multiple stakeholders to find the most optimal decisions for various types of wastes. It addresses the application of MCDM for different types of wastes and waste products, such as biomedical wastes.

298 pages with index. 12 color and 34 b/w illustrations.
HB ISBN: 978-1-77463-013-6 / eBook ISBN: 9781003180586
\$149.95 US / £116.00. September 2021.



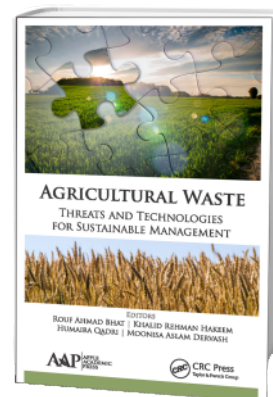
AGRICULTURAL WASTE

Threats and Technologies for Sustainable Management

Editors: Rouf Ahmad Bhat, Cluster University Srinagar, Jammu and Kashmir, India
Khalid Rehman Hakeem, King Abdulaziz University, Saudi Arabia
With Humaira Qadri, and Moonisa Aslam Dervash

Focuses on tackling the harmful impact of agricultural waste with the use of sustainable practices, bio-techniques, and new technologies that either make use of the waste as a raw material or convert the waste into a useful resource that can help achieve environmental sustainability. It investigates the sources and impacts of agri-waste on the environment and goes on to offer effective techniques, processes, and sustainable practices that can be implemented for effective agricultural waste management.

382 pages with index. 16 color and 9 b/w illustrations.
HB ISBN: 978-1-77188-963-6, eBook ISBN: 9781003105046
\$179.95 US / £139.00. July 2021



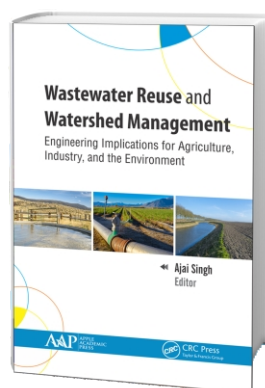
WASTEWATER REUSE AND WATERSHED MANAGEMENT

Engineering Implications for Agriculture, Industry, and the Environment

Editor: Ajai Singh,
Central University of Jharkhand, India

Looks at multitude of ways to capture, treat, and reuse wastewater and how to effectively manage watersheds. It presents a selection of new technologies and methods to recycle, reclaim, and reuse water for agricultural, industrial, and environmental purposes.

542 pages with index.
14 color and 167 b/w illustrations.
HB ISBN: 978-1-77188-746-5 / eBook ISBN: 9780429433986
\$159.95 US / £124.00. June 2019.



ALSO AVAILABLE IN 2022

Biotechnology for Waste Biomass Utilization

Editors: Prakash K. Sarangi, and Latika Bhatia
Approx. 475 pages with index. 15 color and 48 b/w illustrations
HB ISBN: 978-1-77463-995-5 / eBook ISBN: 9781003277187
\$179.95 US / £139.00 Forthcoming August 2022

Integrated Waste Management Approaches for Food and Agricultural Byproducts

Editors: Tawheed Amin, Omar Bashir, Shakeel Ahmad Bhat, and Muneeb Ahmad Malik
Approx. 237 pages with index. 9 color and 16 b/w illustrations
HB ISBN: 978-1-77491-016-0 / eBook ISBN: 9781003282327
\$159.95 US / £124.00 Forthcoming June 2022

Waste Problems and Management in Developing Countries

Editors: Umair Riaz, Shazia Iqbal, and Moazzam Jamil
Approx. 450 pages with index. 9 color and 48 b/w illustrations
HB ISBN: 978-1-77491-054-2 / eBook ISBN: 9781003283621
\$179.95 US / £139.00 Forthcoming August 2022

For complete contents, prices, and more information, click on the book cover or title.

ABOUT APPLE ACADEMIC PRESS

Apple Academic Press, Inc., is an independent international publisher focusing on academic and professional books on cutting-edge research in STEM as well as books in other fields such as the human and social sciences, hospitality and tourism, business and management, library and information science, and others.

With a focus on relevant content as well as first-class production, Apple Academic Press is dedicated to publishing topical, relevant, and informative books written and edited by internationally renowned experts in their fields.

Apple Academic Press made its humble start in 2008 with about 10 books published a year and now publishes over 100 books annually. AAP currently has over 800 titles in print or on press now, with another 120 in production for 2022 and beyond.

Apple Academic Press is an exclusive co-publishing partnership with CRC Press, a member of the Taylor & Francis Group, who handles distribution and marketing for AAP titles. All AAP titles are available in print and in ebook format and are available through major ebook vendors.

AAP is proud to be a member of the STM, the International Association of Scientific, Technical & Medical Publishers.

Apple Academic Press strives to deliver to academic researchers, scientists, university faculty and students, business leaders, and industrial specialists high-quality reference and academic content on today's important topics, helping to keep them abreast of recent advances and improvements in their fields.

AAP SEEKS BOOK PROPOSALS IN THE HUMANITIES & SOCIAL SCIENCES

AAP is looking to expand our line of publications in the humanities and social sciences. If you or your colleague are interested in proposing a new book to us, please contact sandy@appleacademicpress.com for details. We are particularly interested in books on topics in these areas: criminal justice studies, current issues, gender and women's studies, international relations, multicultural and regional studies, politics and government, and social science, to name a few.

Please feel free to share this with your colleagues.

ORDERING INFORMATION

Apple Academic Press titles are distributed worldwide by CRC Press, a Taylor & Francis Group. For ordering information, reseller discounts, returns, and other concerns, please use the contact information below.

US & International sales contacts, please go here: <https://www.routledge.com/contacts/sales>

For additional inquiries, contact the customer services department:

- United States: (Toll Free) +1 (800) 634-7064
- Canada: (Toll Free) +1 (800) 665-1148
- United Kingdom / Rest of World: +44 (20) 7017-6000

ORDERING IN INDIA:

- Online Order: Please note that you can also order AAP titles from [amazon.in](https://www.amazon.in)
- AAP Book Author/Editor Discounts: Please send your inquiries/orders directly to Taylor & Francis via email to marketing@tandfindia.com or inquiry@tandfindia.com so that they can arrange the quotes from the appropriate reseller. Mention the promo code given to you for the author/ editor discount.

EDITORIAL CONTACTS

For information on publishing with Apple Academic Press, please contact:

Sandra Jones Sickels, VP, Editorial & Marketing: sandy@appleacademicpress.com

Sheetal Kumar, Assistant Publishing Manager: sheetal@appleacademicpress.com

Browse and order online:

www.AppleAcademicPress.com

EDITION NOTES

- All AAP books are available in e-book format.
- Many AAP titles published from 2014 to 2020 are being reissued in paperback.

For more information, contact your local Taylor & Francis Sales Representative or info@appleacademicpress.com