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**Mycotoxins are the metabolites of fungus and are reported to contaminate nearly 25% of the food produced worldwide. The mycotoxins of most significance are the aflatoxins due to their severe health implications and their prevalence in food commodities on a larger scale. Aflatoxins are produced by certain species of fungi the most prominent among which are Aspergillus flavus, A. parasiticus and A. nominous. Food commodities of African and South Asian countries are especially reported to have aflatoxins well beyond the allowable limits but due to the global trade of food commodities developed countries are also prone towards the perils of aflatoxins. Moreover, climate changes may have a substantial impact on the distribution and global prevalence of aflatoxins in the near future. The International Agency for Research on Cancer (IARC) has classified the aflatoxins as group 1 category carcinogen. Aflatoxins are hepatocarcinogenic, immunosuppressant and may also cause nervous system and reproductive system disorders. Preventive approaches involving good manufacturing from “farm to fork” are the major focus of the current food industry. The aim of our book is to provide readers with the most recent data and up-to-date studies from aflatoxins research, with specific focuses on (i) the impact of aflatoxins on human health, (ii) new approaches by the researchers from different parts of the world to degrade aflatoxins and (iii) potential preventive approaches that can significantly lessen the burden of aflatoxins in food products**

**Applications of Nanovesicular Drug Delivery provides thorough insights and a complete and updated discussion on the preparation, properties and drug delivery applications of various nanovesicles. This volume will discuss target-specific drug application, such as ocular, transdermal, nasal, intravenous and oral delivery. This title is a valuable resource for academic, pharmaceutical scientists, including industrial pharmacists and analytical scientists, health care professionals and regulatory scientists actively involved in pharmaceutical products and process development of tailored-made polysaccharides in drug delivery applications. Recently, there have been a number of outstanding nanosystems in nanovesicular carrier-forms (such as nanoemulsions, self-nanoemulsifying systems, nanoliposomes, nanotransferosomes, etc.), that have been researched and developed for efficient drug delivery by many formulators, researchers and scientists. However, no previously published books have covered all these drug delivery nanovesicles collectively in a single resource. Provides thorough insights and up-to-date discussions about the various systems of nanovesicular drug delivery Covers advanced trigger-assisted systems (such as iontophoresis, ultra-sound triggering, etc.) and how they have been used for improved drug delivery by nanovesicles**

**Presents recent advances in drug delivery fields by global leaders and experts from academia, research, industry and regulatory agencies Includes an updated literature review of relevant key topics, good quality illustrations, chemical structures, attractive flow charts and well-organized tables**

**While the public bureaucracy in science and political development? What are the alternatives of development for newly emerging nation-states? How does a bureaucracy satisfy or inhibit the requisites of democratic development? Twelve outstanding scholars-Joseph LaPalombara, Fritz Morstein Marx, S. N. Eisenstadt, Fred W. Riggs, Bert F. Hoselitz, Joseph J. Spengler, Merle Fainsod, Carl Beck, J. Donald Kingsley, John T. Dorsey, Ralph Braibanti, and Walter B. Sharp-approach these questions both by historical analysis (in the U.S. and in a score of countries in Europe, Asia, and Africa), and by empirical field research (in such varied places as Nigeria, Pakistan, and Viet Nam). Originally published in 1963. The Princeton Legacy Library uses the latest print-on-demand technology to again make available previously out-of-print books from the distinguished backlist of Princeton University Press. These editions preserve the original texts of these important books while presenting them in durable paperback and hardcover editions. The goal of the Princeton Legacy Library is to vastly increase access to the rich scholarly heritage found in the thousands of books published by Princeton University Press since its founding in 1905.**

The West Pakistan Civil List

Universities of Pakistan 2001

Citrus

Functional Foods

The 21st Century Academic Library

Physiological and Molecular Advances

Human demand for energy has grown multi-folds in recent years. This is the result of rapidly increasing human population, which, in turn, has resulted in increased organic (petroleum) and inorganic pollution on the biosphere. Due to this, we are now facing a number of challenges to sustain life on earth. For example, the increased organic and inorganic pollution in our environment is leading to loss of biodiversity, degradation of environment and thus ultimately causing food insecurity. In this situation, it is imperative to keep updated ourselves with advances on the effects of pollutants, tolerance mechanisms and the potential of different plants and microbes in removing these pollutants from the environment. For this purpose, we invited a number of scientists worldwide to review the current scenario of the problems, current development, and future prospects of the challenges and their solutions in an International Conference on ‘Plants and Environmental Pollution’ held in KAYSERI, TURKEY from 6–11 July 2009. The output of this conference has been summarized in the form of this book.

This book comprehensively reviews drug stability and chemical kinetics: how external factors can influence the stability of drugs, and the reaction rates that trigger these effects. Explaining the important theoretical concepts of drug stability and chemical kinetics, and providing numerous examples in the form of illustrations, tables and calculations, the book helps readers gain a better understanding of the rates of reactions, order of reactions, types of degradation and how to prevent it, as well as types of stability studies. It also offers insights into the importance of the rate at which the drug is degraded and/or decomposed under various external and internal conditions, including temperature, pH, humidity and light. This book is intended for researchers, PhD students and scientists working in the field of pharmacy, pharmacology, pharmaceutical chemistry, medicinal chemistry and biopharmaceutics.

This volume discusses how environmental pollutants are involved in the pathogenesis of neurological disorders, and covers specific mechanisms and risk factors, as well as the necessary strategies to reduce the adverse impacts of environmental pollutants on the human nervous system. With a collection of contributions from experts in environmental pollution, neurology and pharmaceutical chemistry, the book provides both an introduction to the pathogenesis of neurodegeneration, including the types and different classes of neurological disorders, and studies demonstrating the clear link between environmental contaminants (e.g. pesticides, smoking, mycotoxins, persistent organic pollutants (POP's), polychlorinated biphenyls, phthalates, nanomaterials) and the development of neurological disorders in vulnerable populations. The book fills in a gap in research on the topic by also covering state-of-the-art treatment strategies and mitigation measures for each type of pollutant. The book will be of interest to environmental scientists, pharmacologists, toxicologists, biochemists, biotechnologists, and food and drug regulatory organizations.

International Conference of NGOs for Drug Abuse Prevention, Karachi, Pakistan, August 20–25, 1988

Bureaucracy and Political Development. (SPD–2), Volume 2

Environmental Contaminants and Neurological Disorders

A Recent Perspective

Ten Years Work in Librarianship in Pakistan, 1973–1982

Phytochemicals and Health Promoting Potential

A unique handbook providing a set of good practice standards for both producers and consumers of Halal food This accessible, authoritative book covers all aspects of Halal from its origins through to how we expect Halal to develop in the coming years. It explains what Halal is, where it came from, how it is practiced, and by whom. In addition to putting Halal in a religious and cultural context, the book provides practical standards for those working in the Halal trade. It explains why there are so many different interpretations of Halal and why this needs to be resolved if international trade is to be developed. Each chapter in The Halal Food Handbook is written by leading experts in their particular field of study. The first one discusses how regulatory bodies have failed to stem the miss selling and adulteration of Halal foods. The next chapters cover the slaughter process and issues around good practice. The book then looks at regulators—covering Sharia law, UK national laws, and the EU—and outlines the legal framework for enforcing the law. It also compares and contrasts different types of religious slaughter for faith foods; examines attempts to set an international standard for trade; and discusses crop adulteration in Halal foods. The final chapter covers other aspects of Halal, including cosmetics, tourism, lifestyle, and banking, and finishes with a look at what the future holds for Halal. Written and edited by leading international experts in Halal who are backed by the Muslim Council of Britain Presents a set of good practice standards for both producers and consumers of Halal food Covers the complexity of the political, legal, and practical dimensions of Halal food production The Halal Food Handbook will appeal to a wide audience, including abattoirs, manufacturers, retailers, regulators, academics, public bodies catering for Muslims, and the broader Muslim community.

Journal of Social Sciences (COES&RJSS) is an open access, double-blind, peer-reviewed and refereed journal published by Center of Excellence for Scientific & Research Journalism (COES&RJ LLC), USA. The main objective of COES&RJSS is to provide an intellectual platform for the international scholars. COES&RJSS aims to promote interdisciplinary studies in humanities and social science and become the leading journal in humanities and social science in the world. The journal is published quarterly, in both print and online versions. COES&RJSS publishes original papers, review papers, conceptual framework, analytical and simulation models, case studies, empirical research, technical notes, and book reviews. Special Issues devoted to important topics in humanities and social science will occasionally be published.

Recent pharmaceutical sciences and biopharmaceuticals have facilitated the production, design, formulation and use of various types of pharmaceuticals and biopharmaceuticals. This book provides detailed information on the background, basic principles, and components of techniques used for the analysis of pharmaceuticals and biopharmaceuticals. Focusing on those analytical techniques that are most frequently used for pharmaceuticals, it classifies them into three major sections and 19 chapters, each of which discusses a respective technique in detail. Chiefly intended for graduate students in the pharmaceutical sciences, the book will familiarize them with the components, working principles and practical applications of these indispensable analytical techniques.

Stem Cells for Cancer and Genetic Disease Treatment

Green Composites: Preparation, Properties and Allied Applications

Health Benefits and Production Technology

Building Climate Resilience in Agriculture

The Role of Project Management Practices in Avoiding Time and Cost Overruns

Plant Stress Physiology

Increase in world population, extreme weather conditions, decrease in fresh water supplies, and changes of dietary habits are major issues that affect global food security. We are expected to face the challenges of land use by 2050 because population will reach 9 billion while agricultural productivity losses are expected due to overuse of lands. How can we feed the next generations in a manner that respects our finite natural resources? Managing our resources in a sustainable way have only begun for selected crops. Much remains to be done to increase food yield. Cropping practices capable of sustainable production need to be elaborated, especially in fragile ecosystems. Typical applications will include the improvement and use of genetic resources; crop management and diversification; diffusion of improved varieties; development of cropping systems; sustainable cropping systems for areas prone to environmental degradation; use of agro-ecological data for crop production forecasting; and networks for regional coordination, and data exchange. The impetus behind this book is to bring attention to a cropping system that bears direct relevance to sustainable agriculture and food security. “Underutilized” crops are found in numerous agricultural ecosystems and often survive mainly in marginal areas. It is timely to review their status because, in recent decades, scientific and economic interests have emerged which focus on lesser-known cultivated species. Underutilized crops have a great potential to alleviate hunger directly, through increasing food production in challenging environments where major crops are severely limited. “Global Perspectives on Underutilized Crops” is therefore topical and highlights the unmet agricultural challenges that we face today. This book is an important resource for students and researchers of crop science and agricultural policy makers.

In the recent years, the looming food scarcity problem has highlighted plant sciences as an emerging discipline committed to devise new strategies for enhanced crop productivity. The major factors causing food scarcity are biotic and abiotic stresses such as plant pathogens, salinity, drought, flooding, nutrient deficiency or toxicity which substantially limit crop productivity worldwide. In this scenario, strategies should be adopted to achieve maximum productivity and economic crop returns. In this book we have mainly focused on physiological, biochemical, molecular and genetic bases of crop development and related approaches that can be used for crop improvement under environmental adversarries. In addition, the adverse effects of different biotic (diseases, pathogens etc.) and abiotic (salinity, drought, high temperatures, metals etc) stresses on crop development and the potential strategies to enhance crop productivity under stressful environments are also discussed.

Advances in Nanofluid Heat Transfer covers the broad definitions, brief history, preparation techniques, thermophysical properties, heat transfer characteristics, and emerging applications of hybrid nanofluids. Starting with the basics, this book advances step-by-step toward advanced topics, with mathematical models, schematic diagrams and discussions of the experimental work of leading researchers. By introducing readers to new techniques, this book helps readers resolve existing problems and implement nanofluids in innovative new applications. This book provides detailed coverage of stability and reliable measurement techniques for nanofluid properties, as well as different kinds of base fluids. Providing a clear understanding of what happens at the nanoscale, the book is written to be used by engineers in industry as well as researchers and graduate students. Covers new applications of nanofluids, along with key challenges encountered in the commercialization of this technology Highlights new nanofluid properties and associated numerical modeling methods Addresses the very latest topics in nanofluids sciences, such as ionic nanofluids

The Halal Food Handbook

Essentials of Pharmaceutical Analysis

Research Information Bulletin

Advances in Nanofluid Heat Transfer

Wheat and Rice in Disease Prevention and Health

Selected Papers

Master's Thesis from the year 2013 in the subject Business economics – Business Management, Corporate Governance, University of Huddersfield, course: Msc. Business Project Management, language: English, abstract: Over the past two decades, the Pakistani construction sector is experiencing many problems particularly housing shortages, cost and time overruns, and construction defects due to lack of adequate project management practices. The purpose of this study is to investigate the role of project management practices in Pakistan and to identify the cost and time overruns and how they can be achieved or avoided. A series of interviews were conducted to achieve this aim where primary data is collected through survey method. The findings of the paper suggest that Pakistani construction industry differs from the UK in terms of not adequately practicing most of the project management practices. A majority of construction participants agreed that such practices are inherent to avoid the cost/time overruns but some problematic factors are hindering the implementation of those practices in Pakistan. Some of the critical factors include changes in the scope of the project, lack of knowledge, skills and experience, fear of change, lack of top management commitment, and excessive bureaucracy. The paper concludes with a set of recommendations to Pakistani construction sector explaining how they can adopt modern PM practices undertaken in developed countries particularly in the UK to avoid the cost/time overruns.

The 21st Century Academic Library: Global Patterns of Organization and Discourse discusses the organization of academic libraries, drawing on detailed research and data. The organization of the library follows the path of a print book or journal: acquisitions, cataloguing, circulation, reference, instruction, preservation and general administration. Most libraries still have public services and technical services, and are still very print-based in their organization, while their collections and services are increasingly electronic and virtual. This book gathers information on organizational patterns of large academic libraries in the US and Europe, providing data that could motivate libraries to adopt innovative organizational structures or assess the effectiveness of their current organizational patterns. Contributes to the literature on the globalization of information and of library and information science Analyzes and presents data in a way that allows librarians and library administrators to consider what organizational patterns are the most effective for the goals they are pursuing Includes emerging patterns that are not widely seen in the academic library population

While in 1996, the public has grappled with the relationship between Islamic education and radical Islam. Media reports tend to paint madrasas—religious schools dedicated to Islamic learning—as medieval institutions opposed to all that is Western and as breeding grounds for terrorists. Others have claimed that without reforms, Islam and the West are doomed to a clash of civilizations. Robert Hefner and Muhammad Qasim Zaman bring together eleven internationally renowned scholars to examine the varieties of modern Muslim education and their implications for national and global politics. The contributors provide new insights into Muslim culture and politics in countries as different as Morocco, Egypt, Pakistan, India, Indonesia, Iran, and Saudi Arabia. They demonstrate that Islamic education is neither timeless traditional nor medieval, but rather complex, evolving, and diverse in its institutions and practices. They reveal that a struggle for hearts and minds in Muslim lands started long before the Western media discovered madrasas, and that Islamic schools remain on its front line. Schooling Islam is the most comprehensive work available in any language on madrasas and Islamic education.

Aflatoxins in Food

Educational Guide of Pakistan

Journal of Social Sciences (COES&RJ-JSS) Vol. 9 No.1

Journal of Social Sciences (COES&RJ-JSS) Vol.8 No.3

Theory, Practice and Future Perspective

Pakistani Linguistics

This invaluable resource discusses insights ranging from basic biological mechanisms of various types of stem cells through the potential applications in the treatment of human diseases, including cancer and genetic disorders. These discoveries are placed within the structural context of tissue and developmental biology in sections dealing with recent advances in understanding different types of stem cell biology and their potential applications in tissue repair and regeneration and in the treatment different types of human cancer and genetic diseases or disorders. Stem Cells for Cancer and Genetic Disease Treatment and the other books in the Stem Cells in Clinical Applicationsseries will be invaluable to scientists, researchers, advanced students and clinicians working in stem cells, regenerative medicine or tissue engineering as well as cancer or genetics research.

Citrus fruits of the world, with global stability and popularity contributing to human diets. Citrus fruits are the highest-value fruit crop in terms of international trade. Current annual worldwide citrus production is estimated at over 70 million tons, with more than half of this being oranges. The rise in citrus production is mainly due to the increase in cultivation areas, improvements in transportation and packaging, rising incomes, and consumer preference for healthy foods. Citrus fruit growth and quality are dependent on climatic conditions, in addition to soil type, water availability, cultural practices, and nutrient supply. The book briefly explains the fruit morphology, anatomy, physiology and biochemistry, growth phases, maturity standards, grades, and physical and mechanical characteristics of citrus trees. It also provides the foundation for understanding the growth, harvest, and post-harvest aspects of citrus fruits. Insect pests and diseases, irrigation, nutrition, and rootstocks are also addressed in this book.

Wheat and Rice in Disease Prevention and Health reviews the wide range of studies focusing on the health benefits and disease prevention associated with the consumption of wheat and rice, the two most widely consumed whole grains. This book provides researchers, clinicians, and students with a comprehensive, definitive, and up-to-date compendium on the diverse basic and translational aspects of whole grain consumption and its protective effects across human health and disease. It serves as both a resource for current researchers as well as a guide to assist those in related disciplines to enter the realm of whole grain and nutrition research. Overall, studies have shown that a decrease in the amount of whole grains in the modern diet is related to a corresponding increase in health problems that are attributed to this all-too-common dietary imbalance. The resulting health issues associated with an over-processed diet, which provides inadequate levels of nutrients from whole grains, may include obesity, diabetes, high blood lipids, chronic inflammatory states, and an excess of oxidative stress. Strength and endurance may also suffer as a result of these nutrient deficiencies, followed by declines in energy and immunity. Saves researchers and clinicians time in quickly accessing the latest details on a broad range of nutritional and epidemiological issues Provides a common language for nutritionists, nutrition researchers, epidemiologists, and dietitians to discuss how the action of wheat and rice protect against disease and modify human health Preclinical, clinical, and population studies help nutritionists, dieticians, and clinicians map out key areas for research and further clinical recommendations

Hybrid Nanofluids for Convection Heat Transfer

Biomedical Application of Biosurfactant in Medical Sector

Ensuring Health & Nutritional Security Through Nutri- Sensitive Agriculture During Pandemic

Antisemitism on Social Media

Endocrine Disrupting Chemicals-induced Metabolic Disorders and Treatment Strategies

Crop Production Technologies for Sustainable Use and Conservation

Meat holds an important position in human nutrition. Although protein from this source has lower biological value than egg albumin, it is an exclusive source of heme iron and vitamins and minerals. Fat content and fatty acid profile from this source are a constant matter of concern. Though currently meat utilization is linked with an array of maladies, including atherosclerosis, leukemia, and diabetes, meat has a noteworthy role not only for safeguarding proper development and health, but also in human wellbeing. Enormous scientific investigations have proved that consuming meat has had a beneficial role in cranial/dental and gastrointestinal tract morphologic changes, human upright stance, reproductive attributes, extended lifespan, and maybe most prominently, in brain and cognitive development.

Antisemitism on Social Media is a book for all who want to understand this phenomenon. Researchers interested in the matter will find innovative methodologies (CrowdTangle or Voyant Tools mixed with discourse analysis) and new concepts (tertiary antisemitism, antisemitic escalation) that should become standard in research on antisemitism on social media. It is also an invitation to students and up-and-coming and established scholars to study this phenomenon further. This interdisciplinary volume addresses how social media with its technology and business model has revolutionized the dissemination of antisemitism and how this impacts not only victims of antisemitic hate speech but also society at large. The book gives insight into case studies on different platforms such as Twitter, Facebook, TikTok, YouTube, and Telegram. It also demonstrates how social media is weaponized through the dissemination of antisemitic content by political actors from the right, the left, and the extreme fringe, and critically assesses existing counter-strategies. People working for social media companies, policy makers, practitioners, and journalists will benefit from the questions raised, the findings, and the recommendations. Educators who teach courses on antisemitism, hate speech, extremism, conspiracies, and Holocaust denial but also those who teach future leaders in computer technology will find this volume an important resource.

Presents innovative approaches towards affordable, highly efficient, and reliable sustainable energy systems Written by leading experts on the subject, this book provides not only a basic introduction and understanding of conventional fuel cell principle, but also an updated view of the most recent developments in this field. It focuses on the new energy conversion technologies based on present electrolyte-free fuel cells from advanced novel ceria-based composite electrolyte low temperature solid oxide fuel cells to non-electrolyte fuel cells to non-electrolyte conversion technology. Solid Oxide Fuel Cells: From Electrolyte-Based to Electrolyte-Free Devices is divided into three parts. Part I covers the latest developments of anode, electrolyte, and cathode materials as well as the SOFC technologies. Part II discusses the non-electrolyte or semiconductor-based membrane fuel cells. Part III focuses on engineering efforts on material technology, devices and stack developments, and looks at various applications and new opportunities of SOFC using both the electrolyte and non-electrolyte principles, including integrated fuel cell systems with electrolysis, solar energy, and more. Offers knowledge on how to realize highly efficient fuel cells with novel device structures -Shows the opportunity to transform the future fuel cell markets and the possibility to commercialize fuel cells in an extended range of applications -Presents a unique collection of contributions on the development of solid oxide fuel cells from electrolyte based to non-electrolyte-based technology -Provides a more comprehensive understanding of the advances in fuel cells and bridges the knowledge from traditional SOFC to the new concept -Allows readers to track the development from the conventional SOFC to the non-electrolyte or single-component fuel cell Solid Oxide Fuel Cells: From Electrolyte-Based to Electrolyte-Free Devices will serve as an important reference work to students, scientists, engineers, researchers, and technology developers in the fuel cell field.

Schooling Islam

Meat Science and Nutrition

Applications of Nanovesicular Drug Delivery

Benefits, risks and mechanisms of whole grains in health promotion

Phytoremediation for Green Energy

Global Perspectives on Underutilized Crops

This volume offers a detailed and comprehensive analysis of Endocrine Disrupting Chemicals (EDCs), covering their occurrence, exposure to humans and the mechanisms that lead to the pathogenesis of EDCs-induced metabolic disorders. The book is divided into three parts. Part I describes the physiology of the human endocrine system, with special emphasis on various types of metabolic disorders along with risk factors that are responsible for the development of these disorders. Part II addresses all aspects of EDCs, including their role in the induction of various risk factors that are responsible for the development of metabolic disorders. Part III covers up-to-date environmental regulatory considerations and treatment strategies that have been adopted to cure and prevent EDCs-induced metabolic disorders. This section will primarily appeal to clinicians investigating the causes and treatment of metabolic disorders. The text will also be of interest to students and researchers in the fields of Environmental Pharmacology and Toxicology, Environmental Pollution, Pharmaceutical Biochemistry, Biotechnology, and Drug Metabolism/Pharmacokinetics.

The phytochemicals present in functional foods play a vital role in boosting immunity and promoting health. This book provides a comprehensive overview of the importance of functional foods and antioxidants and their scavenging activity for preventing various health-related disorders. This book also covers the therapeutic and medicinal potential of various bioactive compounds for a healthy lifestyle, as well as examines different products containing functional ingredients that demonstrate health-promoting potential.

Green Sustainable Process for Chemical and Environmental Engineering and Science, the latest release in the Green Composites: Preparation, Properties and Allied Applications series, deals with the most promising aspects of green composites. The book presents in-depth and updated literature related to the manufacturing of green composites and their properties and discusses special features of green composites and their applications. All green composites covered in this work are polymeric and of bio-origin. The book also provides industrial applications of green composites. Topics covered include the use of green composites, vegetable packing, foam, blends, rubber, solar cells, adhesives and 3D printing. Focuses on the manufacturing of green composites Features green composites of bio-origin Covers versatile applications of green composites in daily life Discusses various applications of green composites in industry Provides an overview of green composites for the packing industry Outlines the use of green composites as foam, blends and adhesives

Drug Stability and Chemical Kinetics

Solid Oxide Fuel Cells

The Construction Sector in Pakistan and the UK

Green Sustainable Process for Chemical and Environmental Engineering and Science

Crop Production for Agricultural Improvement

Annual Report

Green Sustainable Process for Chemical and Environmental Engineering and Science: Biomedical Application of Biosurfactant in Medical Sector highlights the numerous applications of biosurfactants in the field of medicine, especially as a replacement to synthetic drugs which have developed several levels of resistance over the years. Special emphasis is laid on their application as non-pyrogenic and non-toxic immunological adjuvants and their inhibitory characteristics against H+, K+, -ATPase and defense against gastric ulcers, along with their practical application as anti-adhesive coating agents for medical insert materials. The book addresses issues by combining knowledge of their production with information on a range of medical applications. Drawing on the knowledge of its expert team of global contributors, this book provides useful insights for all those currently or potentially interested in developing or applying biosurfactants in their own work. Reflects on differing strains of fungi, bacteria, actinomycetes and yeast, and reviews genetic modification of such strains for enhanced biosurfactant production Explores the use of biosurfactants across a broad range of medical applications Provides mathematical modeling, metabolomics, bioinformatics, metabolic engineering, systems biology and computer technology for solving real-life challenges using biosurfactants Presents biosurfactants as an innovative green, biotechnological solution to improve human health Highlights the numerous applications of biosurfactants in the field of medicine, most especially as a replacement to synthetic drugs which have been reported to develop several levels of resistance over the years

Crop Production Technologies for Sustainable Use and Conservation:Physiological and Molecular Advances presents an abundance of research on important and new production technologies for the successful sustainable production of major crops. The volume covers most of the major crops used the production of food, sugar, and chemical fiber. With the focus on sustainability and conservation issues in crop production, the chapters present molecular and physiological research and innovations for increasing yield, quality, and safety while also taking into considering increasing demand, diminishing water and land resources, and the agricultural consequences of climate change on crop production. The major crops discussed include wheat, mungbean, cotton, jute, sugarcane, eggplant, Solanum (such as potatoes and tomatoes), peppers,okra, fruits such as apples and pears, and more. The chapters report on developments and research on production techniques related to various fertilizers, biosystematics and molecular biology of various crops, and building resistance to climatic change, including drought tolerance, salinity stresses, and more.

Hybrid Nanofluids for Convection Heat Transfer discusses how to maximize the heat transfer fluids. The book addresses defining and manufacturing techniques, thermophysical properties and heat transfer characteristics with mathematical models, performance-affecting factors, and core applications with implementation challenges of hybrid nanofluids. The work adopts mathematical models and schematic diagrams in review of available experimental methods. It enables readers to create new techniques, resolve existing research problems, and ultimately to implement hybrid nanofluids in convection heat transfer applications. Provides key heat transfer performance and thermophysical characteristics of hybrid nanofluids Reviews parameter selection and property measurement techniques for thermal performance calibration Explores the use of predictive mathematical techniques for experimental properties

From Electrolyte-Based to Electrolyte-Free Devices

Handbook

Global Patterns of Organization and Discourse

**Social Science Projects in Southern Asia**

**The Culture and Politics of Modern Muslim Education**

*Due to the changing climate, food security for the increasing population has raised a great threat globally. Therefore, it is imperative to find alternate solutions for enhancing agricultural sustainability through plant stress physiology. The concept of plant stress physiology has been well-established over the past 60 years due to the increasing trends of environmental stress. Researchers have found that crop stress physiology has an association with two main areas, one is concerned with agronomy, the other concerned with plant breeding. The contents of the current book emphasize the integration of both breeding and agronomy strategies to ensure agricultural productivity and environmental safety under changing climate.*