

Sgbau Time Table 2016 Amravati University Winter Part 1 2 3

Antibiotic Resistance: Mechanisms and New Antimicrobial Approaches discusses up-to-date knowledge in mechanism antibiotic resistance and all recent advances in fighting microbial resistance such as the applications of nanotechnology products, bacteriophages, marine products, algae, insect-derived products, and other alternative methods that can be used to fight bacterial infections. Understanding fundamental mechanisms of antibiotic resistance is a key step in the discovery of effective methods to cope with resistance. This book also discusses methods used to fight antibiotic-resistant infections based on a deep understanding of the mechanisms involved in the development of the resistance. Discusses methods used to fight antibiotic-resistant infection based on a deep understanding of mechanisms involved in the development of the resistance Provides information on modern methods used to fight antibiotic resistance Covers a wide range of alternative methods to fight antibiotic resistance, offering the most complete information available Discusses both newly emerging trends and traditionally used methods to fight antibiotic resistant infections in light of recent scientific developments Offers the most up-to-date information on fighting antibiotic resistance Includes involvement of contributors all across the world, presenting questions of interest to researchers of both developed and developing countries

Machine learning (ML) and deep learning (DL) algorithms are invaluable resources for Industry 4.0 and allied areas and are considered as the future of computing. A subfield called neural networks, to recognize and understand patterns in data, where machines carry out tasks in a manner similar to humans. The intelligent models developed using ML and DL are effectively designed and are fully investigated – bringing in practical applications in many fields such as health care, agriculture, and security. These algorithms can only be successfully applied in the context of data computing and analysis. Today, ML and DL have created conditions for potential developments in detection and prediction. Apart from these domains, ML and DL are also useful in analysing the social behaviour of humans. With the advancements in the amount and type of data available, it has become necessary to build a means to process the data and that is where deep neural networks prove their importance. Deep neural networks are capable of handling a large amount of data in such fields as finance and images. This book also explores various applications in Industry 4.0 including: · Fundamental models, issues and challenges in ML and DL. · Comprehensive analysis of deterministic and probabilistic approaches for ML and DL. · Various applications in healthcare predictions such as mental health, cancer, thyroid disease, lifestyle disease and cardiac arrhythmia. · Industry 4.0 applications such as facial recognition, feature classification, water stress prediction, deforestation control, tourism and social networking. · Security aspects of Industry 4.0 applications suggest remedial actions against possible attacks and prediction of associated risks. - Information is presented in an accessible way for students, researchers and scientists, business innovators and entrepreneurs, sustainable assessment and management professionals. This book equips readers with a knowledge of data analytics, ML and DL techniques for applications defined under the umbrella of Industry 4.0. This book offers comprehensive coverage, promising ideas and outstanding contributions, supporting further development of ML and DL approaches by applying intelligence in various applications.

Mycotic keratitis, also known as fungal keratitis, is commonly defined as an inflammation of the cornea. Globally, mycotic keratitis is more common as compared to other eye disorders. Though it occurs in all parts of the world it is more prevalent in tropical and subtropical areas. Mycotic Keratitis emphasizes novel perspectives on mycotic keratitis treatments and different therapies used in treatment. The book is designed to be immensely useful for the students and teachers of ophthalmology, medicine, mycology, ophthalmology, biotechnology and nanotechnology. Medical microbiology researchers in general and medical mycology in particular will find it a valuable user-friendly book.

Incorporating the most important advances in the fast-growing field of cancer biology, the text maintains all of its key features. It is admired by students, instructors, researchers, and clinicians around the world for its clear writing, excellent color art program, and numerous pedagogical features.

Bioenergy and Biofuels

Important Bird Areas of Maharashtra

Advanced Informatics for Computing Research

Promising Antimicrobials from Natural Products

Nanotechnology for Bioenergy and Biofuel Production

Second International Student Edition

This book deals with the polymers, different methods of synthesis, and synthesis of composites, as well as the different techniques used for polymer characterization. Most of the world's industries extract the anomalous properties of polymers to make excellent cost-effective materials. Because of this, the types of polymers, their processing, and the analysis of their various properties are very significant. Readers will gain a thorough knowledge about the processing of different types of polymers and composites made from them, as well as their various applications. Suitable for classroom use but especially important for researchers, this book addresses: Adhesion of amorphous polymers with vitrified bulk and surface glass transition Functionalized biopolymers and their applications A new synthesis of p-Cresol-Adipamide-Formaldehyde copolymer resin and its applications as an ion-changer Correlating performance of commercial viscosity modifiers for formulating shear stable industrial lubricants Synthesis of phthalonitrile polymers in ionic liquid and microwave media Studies on nanocomposite polymer electrolytes doped with $\text{Ca}_3(\text{PO}_4)_2$ for lithium batteries Medicinal plants have been used in the prevention, diagnosis, and elimination of diseases based on the practical experience of thousands of years. There is a pressing need to initiate and transform laboratory research into fruitful formulations leading to the development of

newer products for the cure of diseases such as AIDS, cancer, and hepatitis
The book focuses on how machine learning and the Internet of Things (IoT) has empowered the advancement of information driven arrangements including key concepts and advancements. Ontologies that are used in heterogeneous IoT environments have been discussed including interpretation, context awareness, analyzing various data sources, machine learning algorithms and intelligent services and applications. Further, it includes unsupervised and semi-supervised machine learning techniques with study of semantic analysis and thorough analysis of reviews. Divided into sections such as machine learning, security, IoT and data mining, the concepts are explained with practical implementation including results. Key Features Follows an algorithmic approach for data analysis in machine learning Introduces machine learning methods in applications Address the emerging issues in computing such as deep learning, machine learning, Internet of Things and data analytics Focuses on machine learning techniques namely unsupervised and semi-supervised for unseen and seen data sets Case studies are covered relating to human health, transportation and Internet applications

In this valuable volume, new and original research on various topics on chemical engineering and technology is presented on modeling and simulation, material synthesis, wastewater treatment, analytical techniques, and microreactors. The research presented here can be applied to technology in food, paper and pulp, polymers, petrochemicals, surface coatings, oil technology aspects, among other uses. The book is divided into five sections: modeling and simulation environmental applications materials and applications processes and applications analytical methods Topics include: modeling and simulation of chemical processes process integration and intensification separation processes advances in unit operations and processes chemical reaction engineering fuel and energy advanced materials CFD and transport processes wastewater treatment The valuable research presented here will be of interest to researchers, scientists, industry practitioners, as well as upper-level students.

Developments in Higher Education

Microbial-Mediated Induced Systemic Resistance in Plants

The Biology of Cancer

Antibiotic Resistance

Nanotechnology in Skin, Soft Tissue, and Bone Infections

Biomedical Applications of Metals

Given novel infectious diseases such as COVID-19 and antibiotic resistance new antimicrobial discovery is an important research area. Considering that nature is a vast source of bioactive molecules with antimicrobial activity, the main aim of this book is to present a comprehensive outlook of current research in the field of natural antimicrobials. It discusses the antimicrobial activity of medicinal plants, beehives, and mushrooms with a global coverage of antimicrobial agents from rich forests of Brazil (Amazon), North-Eastern forests of Peru, Argentina, Colombia, India, Bangladesh, Nepal, Middle East, Turkey, Croatia, Greece, Germany and Russia. The book covers the results of the in vitro screening of antimicrobial activities of extracts and isolated compounds from natural origins. It is divided into three sections: i) Section I, includes natural antimicrobials from plants; ii) Section II incorporates antimicrobial agents/secondary metabolites from plants, and (iii) Section III focuses on antimicrobials from mushrooms, beehive and delivery systems for different types of antimicrobials.

Promising Antimicrobials From Natural Products is immensely useful for post graduate students, researchers in plant science, microbiology, biotechnology, pharmacology, pharma companies and those who are interested in herbal, eco-friendly, cost-effective and sustainable antimicrobials

Future Trends in 5G and 6G: Challenges, Architecture, and Applications offers a comprehensive overview of basic communication and networking technologies. It focuses on emerging technologies, such as Software-Defined Network (SDN)-based ad hoc networks, 5G, Machine Learning, and Deep Learning solutions for communication and networking, Cloud Computing, etc. It also includes discussions on practical and innovative applications, including Network Security, Smart Cities, e-health, and Intelligent Systems. The book addresses several key issues in SDN energy-efficient systems, the Internet of Things, Big Data, Cloud Computing and Virtualization, Machine Learning, Deep Learning, Cryptography, and 6G wireless technology and its future. It provides students, researchers, and practicing engineers with an expert guide to the fundamental concepts, challenges, architecture, applications, and state-of-the-art developments in communication and networking.

"This book focuses on the study of resources and methods for the management of healthcare infrastructure and information highlighting health and clinical data structure, behavior, and interactions of natural and engineered computational systems to helps researchers and practitioners learn further investigation and solutions" --

This two-volume set (CCIS 1075 and CCIS 1076) constitutes the refereed proceedings of the Third International Conference on Advanced Informatics for Computing Research, ICAICR 2019, held in Shimla, India, in June 2019. The 78 revised full papers presented were carefully reviewed and selected from 382 submissions. The papers are organized in topical sections on computing methodologies; hardware; information systems; networks; software and its engineering.

Sport Science and Studies in Asia

Proceedings of IC-ICN 2020

Data Communications and Networking

Source Reduction and Waste Minimization
 Applied Machine Learning for Smart Data Analysis
 Compiler Construction

Topics 1. Statistics In Experimental Pharmacology 2. Summary Of Cpcsea Guidelines For Animal House Facility 3. Instruments In Experimental Pharmacology 4. Handling Of Animals & Routes Of Administration 5. 46 Experiments Of Intact Animals (Unique Feature : Includes four colour pages on 'Handling of Animals')

Presents nanobiotechnology in drug delivery and disease management Featuring contributions from noted experts in the field, this book highlights recent advances in the nano-based drug delivery systems. It also covers the diagnosis and role of various nanomaterials in the management of infectious diseases and non-infectious disorders, such as cancers and other malignancies and their role in future medicine. Nanobiotechnology in Diagnosis, Drug Delivery and Treatment starts by introducing how nanotechnology has revolutionized drug delivery, diagnosis, and treatments of diseases. It then focuses on the role of various nanocomposites in diagnosis, drug delivery, and treatment of diseases like cancer, Alzheimer's disease, diabetes, and many others. Next, it discusses the application of a variety of nanomaterials in the diagnosis and management of gastrointestinal tract disorders. The book explains the concept of nanotheranostics in detail and its role in effective monitoring of drug response, targeted drug delivery, enhanced drug accumulation in the target tissues, sustained as well as triggered release of drugs, and reduction in adverse effects. Other chapters cover aptamer-incorporated nanoparticle systems; magnetic nanoparticles; theranostics and vaccines; toxicological concerns of nanomaterials used in nanomedicine; and more. Provides a concise overview of state-of-the-art nanomaterials and their application like drug delivery in infectious diseases and non-infectious disorders

Highlights recent advances in the nano-based drug delivery systems and role of various nanomaterials Introduces nano-based sensors which detect various pathogens Covers the use of nanodevices in diagnostics and theranostics Nanobiotechnology in Diagnosis, Drug Delivery and Treatment is an ideal book for researchers and scientists working in various disciplines such as microbiology, biotechnology, nanotechnology, pharmaceutical biotechnology, pharmacology, pharmaceuticals, and nanomedicine.

There are physical and chemical methods of synthesis of nanomaterials. But due to the damage caused by these methods to the environment there is a pressing need of green nanotechnology, which is a clean and eco-friendly technology for the development of nanomaterials. The present book includes green synthesis of nanoparticles by algae, diatoms and plants. The mechanism behind the synthesis of nanoparticles will also be discussed. The book would be a valuable resource for students, researchers and teachers of biology, chemistry, chemical technology, nanotechnology, microbial technology and those who are interested in green nanotechnology.

Pythium is one of the most important phytopathogens causing significant damage to agriculture, forest, and nurseries, etc. It is an unseen enemy of the root zone of various plants and hence considered as "hidden terror" for a number of plants. An accurate diagnosis and identification of Pythium causing various infections in plants is very important because it is often confused with several other fungi. Pythium infections are difficult to control once they have set in. Therefore, its effective and ecofriendly management is of paramount importance. In addition, there are many reports on Pythium causing infections in human beings and animals. The present book on Pythium focuses on various aspects which mainly include pathogenesis, technological developments in detection and diagnosis, and its management. Key Features Includes identification of Pythium spp. by traditional and molecular methods Deals with different diseases caused by Pythium spp Describes the role of Pythium in mammalian diseases Incorporates various management strategies Discusses emerging role of nanotechnological tools for the management of Pythium diseases

From Lab to the Market

Issues, Reflections and Emergent Solutions

Process Modeling, Simulation, and Environmental Applications in Chemical Engineering

Design of Intelligent Applications using Machine Learning and Deep Learning Techniques

Basic Research and Applications of Mycorrhizae

Plant Metabolism

This book is an outcome of the MycoGlobe conference in Accra. Most of the chapters are based on invited oral presentations made at the conference. The chapters in this book touch on issues including health, trade, ecology, epidemiology, occurrence, detection, management, awareness and policy. This book serves as a source of information on the occurrence and impact of mycotoxins on everything from trade and health to agricultural production in addition to suggesting opportunities for their management in Africa and elsewhere by researchers, policy makers and development investors.

"The text is suitable for a typical introductory algebra course, and was developed to be used flexibly. While the breadth of topics may go beyond what an instructor would cover, the modular approach and the richness of content ensures that the book meets the needs of a variety of programs."--Page 1.

Focused more specifically on the recent advances in applications of various metals and their complexes used in biomedicine, particularly in the diagnosis and treatment of chronic diseases. The editors give equal importance to other key aspects such as toxicological issues and safety concerns. The application of metals in the biomedical field is highly interdisciplinary and has a broad appeal across all biomedical specialties. Biomedical Applications of Metals is particularly focused on covering the role of metals in medicine and the development of novel therapeutic products and solutions in the form of alternative medicines, and some topics on Indian traditional medicine i.e., "Ayurveda". In Section I, the book discusses the role of metals in medicines and include chapters on nanoparticles, noble metals, medical devices, copper, selenium, silver, and microbial pathogens; while Section II includes topics on metals toxicity including heavy metals, carcinogens, cancer therapy, Bhasma's and chelating agents used in Ayurveda, and biochemical and molecular targets including actions of metals. These new and emerging concepts of applications of metals in medicine, their crucial role in management of microbial resistance, and their use in the treatment of various chronic diseases is essential information for toxicologists, and clinical and biomedical researchers.

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Proceedings of 2nd International Conference, ICICC 2017

Introduction to Virology

Basic Concepts, Mathematical Modeling and Applications

Green Biosynthesis of Nanoparticles

Mycotoxins

Select Proceedings of i-CASIC 2020

The volume presents high quality research papers presented at Second International Conference on Information and Communication Technology for Intelligent Systems (ICICC 2017). The conference was held during 2–4 August 2017, Pune, India and organized communally by Dr. Vishwanath Karad MIT World Peace University, Pune, India at MIT College of Engineering, Pune and supported by All India Council for Technical Education (AICTE) and Council of Scientific and Industrial Research (CSIR). The volume contains research papers focused on ICT for intelligent computation, communications and audio, and video data processing.

Plant Metabolism was first published in 1990 under the title of 'Plant Physiology, Biochemistry and Molecular Biology'. This edition has been thoroughly revised, reorganised and updated, incorporating the latest developments in this exciting field. The text is divided into ten sections, each dealing with a particular aspect of plant metabolism. Section I deals with the fundamentals of the control of metabolism. This includes new chapters on protein synthesis and the molecular biology of plant development. Section II contains new chapters on the cell wall, structure, communication and defense. Sections III to IX cover all other major processes and pathways of plant metabolism and have been revised and updated to incorporate recent changes and advances in the field. The final section of the book contains new chapters on the manipulation of carbon allocation in plants and on the biochemical basis for plant improvement. Key Features: - Provides up to date information by authors who are actively engaged in research, so that each chapter presents the latest ideas in every area covered by the book- Plant biochemistry, molecular biology and physiology are integrated, rather than being presented separately. With a focus on food safety, this book highlights the importance of microbes in sustainable agriculture. Plants, sessile organisms that are considered as primary producers in the ecosystem and communicate with above- and below-ground communities that consist of microbes, insects, and other vertebrate and invertebrate animals, are subjected to various kinds of stress. Broadly speaking, these can be subdivided into abiotic and biotic stresses. Plants have evolved to develop elaborate mechanisms for coping with and adapting to the environmental stresses. Among other stresses, habitat-imposed biotic stress is one serious condition causing major problems for crop productivity. Most plants employ plant-growth-promoting microorganisms (PGPMs) to combat and protect themselves from stresses and also for better growth. PGPMs are bacteria associated with plant roots and they augment plant productivity and immunity. They are also defined as root-colonizing bacteria that have beneficial effects on plant growth and development. Remarkably, PGPMs including mycorrhizae, rhizobia, and rhizobacteria (Acinetobacter, Agrobacterium, Arthrobacter, Azospirillum, Bacillus, Bradyrhizobium, Frankia, Pseudomonas, Rhizobium, Serratia, Thiobacillus) form associations with plant roots and can promote plant growth by increasing plants' access to soil minerals and protecting them against pathogens. To combat the pathogens causing different diseases and other biotic stresses, PGPMs produce a higher level of resistance in addition to plants' indigenous immune systems in the form of induced systemic resistance (ISR). The ISR elicited by PGPMs has suppressed plant diseases caused by a range of pathogens in both the greenhouse and field. As such, the role of these microbes can no longer be ignored for sustainable agriculture. Today, PGPMs are also utilized in the form of bio-fertilizers to increase plant productivity. However, the use of PGPMs requires a precise understanding of the interactions between plants and microbes, between microbes and microbiota, and how biotic factors influence these relationships. Consequently, continued research is needed to develop new approaches to boost the efficiency of PGPMs and to understand the ecological, genetic and biochemical relationships in their habitat. The book focuses on recent research concerning interactions between PGPMs and plants under biotic stress. It addresses key concerns such as - 1. The response of benign microbes that benefit plants under biotic stress 2. The physiological changes incurred in plants under harsh conditions 3. The role of microbial determinants in promoting plant growth under biotic stress The book focuses on a range of aspects related to PGPMs such as their mode of action, priming of plant defence and plant growth in disease challenged crops, multifunctional bio-fertilizers, PGPM-mediated disease suppression, and the effect of PGPMs on secondary metabolites etc. The book will be a valuable asset to researchers and professionals working in the area of microbial-mediated support of plants under biotic stress.

This book gathers high-quality peer-reviewed research papers presented at the International Conference on Intelligent Computing and Networking (IC-ICN 2020), organized by the Computer Department, Thakur College of Engineering and Technology, in Mumbai, Maharashtra, India, on February 28–29, 2020. The book includes innovative and novel papers in the areas of intelligent computing, artificial intelligence, machine learning, deep learning, fuzzy logic, natural language processing, human-machine interaction, big data mining, data science and mining, applications of intelligent systems in healthcare, finance, agriculture and manufacturing, high-performance computing, computer networking, sensor and wireless networks, Internet of Things (IoT), software-defined networks, cryptography, mobile computing, digital forensics and blockchain technology.

Algebra and Trigonometry

Mechanisms and New Antimicrobial Approaches

As Amended upto the Maharashtra Public Universities (Amendment) Act, 2019 (Mah. Act No. X of 2019), dated 08-07-2019 (w.e.f. 05-03-2019)

Handbook of Research on Applied Intelligence for Health and Clinical Informatics

Diagnosis, Diseases and Management

Intelligent Computing and Networking

Mycorrhizal research has grown by leaps and bounds in the past few decades. These fungi promise to promote plant growth, maintain plant and soil health, assist in bio-protection against root diseases, production with reduced fertilizer and pesticides & nutrient acquisition, affect soil skeletal structure holding primary soil particles together, are conducive to formation of microaggregate structures, higher rhizosphere population, symbiosis alters host water relations, alter root length and architecture. These fungi also help in re-vegetation of landscapes, golf course or contaminated soils, biological hardening of tissue culture raised plants, postpone leaf dehydration, draught responses, osmo-protecting enzymes and enhance P acquisition. AM symbiosis could conceivably affect any of these steps. AMF should be considered as an alternative to costly soil disinfection. The mechanism(s) by which fungi induce resistance in their hosts and enhance disease resistance need critical evaluation and examination. Editors see this volume as a tremendously valuable collection of specialized up-date chapters describing the State-of-The-Art and Modern Protocols in mycorrhizal research, seriously presented and synthesized.

This book, divided in two volumes, originates from Techno-Societal 2018: the 2nd International Conference on Advanced Technologies for Societal Applications, Maharashtra, India, that brings together faculty members of various engineering colleges to solve Indian regional relevant problems under the guidance of eminent researchers from various reputed organizations. The focus is on technologies that help develop and improve society, in particular on issues such as the betterment of differently abled people, environment impact, livelihood, rural employment, agriculture, healthcare, energy, transport, sanitation, water, education. This conference aims to help innovators to share their best practices or products

developed to solve specific local problems which in turn may help the other researchers to take inspiration to solve problems in their region. On the other hand, technologies proposed by expert researchers may find applications in different regions. This offers a multidisciplinary platform for researchers from a broad range of disciplines of Science, Engineering and Technology for reporting innovations at different levels.

This book aims to inform readers about the recent developments in bioenergy and biofuels covering current issues from an interdisciplinary approach. It will also feature coverage of anticipated future trends related to each particular biofuel. Chapters will consist of original research presented by world class experts in their respective fields. A number of interdisciplinary areas will be incorporated such as Energy & Fuels, Biotechnology, Genomics, Economics, Optimization, Chemical Engineering, Mechanical Engineering and Algae Science. Examples will relate to a matrix of biofuel and energy types such as bioethanol, biobutanol, and biomethane.

Compilers and operating systems constitute the basic interfaces between a programmer and the machine for which he is developing software. In this book we are concerned with the construction of the former. Our intent is to provide the reader with a firm theoretical basis for compiler construction and sound engineering principles for selecting alternate methods, implementing them, and integrating them into a reliable, economically viable product. The emphasis is upon a clean decomposition employing modules that can be re-used for many compilers, separation of concerns to facilitate team programming, and flexibility to accommodate hardware and system constraints. A reader should be able to understand the questions he must ask when designing a compiler for language X on machine Y, what tradeoffs are possible, and what performance might be obtained. He should not feel that any part of the design rests on whim; each decision must be based upon specific, identifiable characteristics of the source and target languages or upon design goals of the compiler. The vast majority of computer professionals will never write a compiler. Nevertheless, study of compiler technology provides important benefits for almost everyone in the field. • It focuses attention on the basic relationships between languages and machines. Understanding of these relationships eases the inevitable transitions to new hardware and programming languages and improves a person's ability to make appropriate tradeoffs in design and implementation.

Pythium

Priority Sites for Conservation

Future Trends in 5G and 6G

Principles and Practice

The Maharashtra Public Universities Act, 2016

Techno-Societal 2018

The main goal of the present book is to deal with the role of nanobiotechnology in skin, soft tissue and bone infections since it is difficult to treat the infections due to the development of resistance in them against existing antibiotics. The present interdisciplinary book is very useful for a diverse group of readers including nanotechnologists, medical microbiologists, dermatologists, osteologists, biotechnologists, bioengineers. Nanotechnology in Skin, Soft-Tissue, and Bone Infections is divided into four sections: Section I- includes role of nanotechnology in skin infections such as atopic dermatitis, and nanomaterials for combating infections caused by bacteria and fungi. Section II- incorporates how nanotechnology can be used for soft-tissue infections such as diabetic foot ulcer and other wound infections; Section III- discusses about the nanomaterials in artificial scaffolds bone engineering and bone infections caused by bacteria and fungi; and also about the toxicity issues generated by the nanomaterials in general and nanoparticles in particular. The readers will be immensely enriched by the knowledge of new and emerging nanobiotechnologies in a variety of platforms.

Globally considered as one of the key technologies in the field of wireless communications, cognitive radio has the capability to solve the issues related to radio spectrum scarcity with the help of dynamic spectrum allocation. It discusses topics including software defined radio architecture, linear predictive coding, variance fractal compression, optimal Codec design for mobile communication system, digital modulation techniques, spectrum sensing in cognitive radio networks and orthogonal frequency division multiplexing in depth. The text is primarily written for senior undergraduate and graduate students, in learning experimental techniques, designing and implementing models in the field wireless communication.

A unique feature of this book is its focus on nanotechnological solutions for the production of bioenergy and biofuels. Coverage includes topics such as nanobiotechnology, microalgae, biofuel cells, biomass pretreatment, and biomass conversion. An international team of experts also addresses the need to precisely characterize nanoparticles and the role of catalysts. The range of topics addressed, together with a chapter on risk management, make this book a highly useful resource for a broad readership including physicists, chemists, microbiologists, biotechnologists, food technologists, agricultural engineers, and nanotechnologists.

This book presents the select proceedings of the International Conference on Automation, Signal Processing, Instrumentation and Control (i-CASIC) 2020. The book mainly focuses on emerging technologies in electrical systems, IoT-based instrumentation, advanced industrial automation, and advanced image and signal processing. It also includes studies on the analysis, design and implementation of instrumentation systems, and high-accuracy and energy-efficient controllers. The contents of this book will be useful for beginners, researchers as well as professionals interested in instrumentation and control, and other allied fields.

A Handbook Of Experiments In Pre-clinical Pharmacology

Mechanisms and Applications

Advances in Automation, Signal Processing, Instrumentation, and Control

Polymer Processing and Characterization

Challenges, Architecture, and Applications

Cosmetics are the most widely applied products to the skin and include creams, lotions, gels and sprays. Their formulation, design and manufacturing ranges from large cosmetic houses to small private companies. This book covers the current science in the formulations of cosmetics applied to the skin. It includes basic formulation, skin science, advanced formulation, and cosmetic product development, including both descriptive and mechanistic content with an emphasis on practical aspects. Key Features: Covers cosmetic products/formulation from theory to practice Includes case studies to illustrate real-life formulation development and problem solving Offers a practical, user-friendly approach, relying on the work of recognized experts in the field Provides insights into the future directions in cosmetic

product development Presents basic formulation, skin science, advanced formulation and cosmetic product development

The study of viruses is known as virology. It focuses on the structure, evolution and behavior of viruses. Studying them is vital, as they cause various infectious diseases like dengue, yellow fever, smallpox, etc. The classification of viruses is done on the basis of the host that they infect, like fungal viruses, bacteriophages, animal viruses, etc. This book attempts to assist those with a goal of delving into the field of virology. Coherent flow of topics, student-friendly language and extensive use of examples make this textbook an invaluable source of knowledge.

This important book presents the latest research from around the globe on the developments in higher education in areas such as interteaching, the socio-economic demand for higher education, improving visual teaching materials, online learning, anthropology of education, etc. The phenomenal expansion of higher education systems in the second half of the twentieth century has resulted in an interest in the factors influencing the decision of young people to pursue tertiary education. The demand for higher education is commonly considered to be subject to a great number of influences, the most important of which fall under the following categories of variables: social/familial, psychological/individual, economic/occupational, and structural/institutional.

Source Reduction and Waste Minimization is the second volume in the series Advanced Zero Waste Tools: Present and Emerging Waste Management Practices. It addresses processes and practices for waste minimization to support efforts to promote a more sustainable society and provide readers with a proper understanding of the major mechanisms followed for waste minimization across fields. Despite being one of the major challenges mankind is facing to establish a sustainable society, waste minimization techniques are not broadly adopted and an organized collection of these techniques with corresponding evidence of results is not available currently. This book covers numerous mechanisms supported by scientific evidence and case studies, as well as in-depth flowcharts and process diagrams to allow for readers to adopt these processes. Summarizing the present and emerging zero waste tools on the scale of both experimental and theoretical models, Advanced Zero Waste Tools is the first step toward understanding the state-of-the-art practices in making the zero-waste goal a reality. In addition to environmental and engineering principles, it also covers economic, toxicologic, and regulatory issues, making it an important resource for researchers, engineers, and policymakers working toward environmental sustainability. Uses fundamental, interdisciplinary, and state-of-the-art coverage of zero waste research to provide an integrated approach to tools, methodology, and indicators for waste minimization Covers current challenges, design and manufacturing technology, and sustainability applications Includes up-to-date references and web resources at the end of each chapter, as well as a webpage dedicated to providing supplementary information

Third International Conference, ICAICR 2019, Shimla, India, June 15-16, 2019, Revised Selected Papers, Part I

New Horizons in Biotechnology

Intelligent Computing and Information and Communication

Detection Methods, Management, Public Health, and Agricultural Trade

Proceedings of the 2nd International Conference on Advanced Technologies for Societal Applications - Volume 2

Cosmetic Formulation

Sport Science and Studies in Asia encourages readers to be reflective practitioners, as students or researchers, or thinkers of sports, to be independent seekers of future sport knowledge, and yet mindful and grounded in a full knowledge and awareness of the social, cultural and country-specific nuances of sports. It invites discussions and debates on a diversity of topics covered, and is suitable text for undergraduate and graduate study of sports in Asia. This publication hopes to light the fuse that will fuel enthusiasm of sports-associated outcomes as well as heighten sport interest among the more discerning consumers of sport, result in more extensive research and development in sports, generate greater spin-offs in sport innovation in terms of new training approaches and sport products, and a greater appreciation that sports and human kind are inseparable.

"Supported by Nagpur Birds ... [et al]."

The practice of biotechnology, though different in style, scale and substance in globalizing science for development involves all countries. Investment in biotechnology in the industrialised, the developing, and the least developed countries, is now amongst the widely accepted avenues being used for economic development. The simple utilization of kefir technology, the detoxification of injurious chemical pesticides e.g. parathion, the genetic tailoring of new crops, and the production of a first of a kind of biopharmaceuticals illustrate the global scope and content of biotechnology research endeavour and effort. In the developing and least developed nations, and in which the 9 most populous countries are encountered, problems concerning management of the environment, food security, conservation of human health resources and capacity building are important factors that influence the path to sustainable development. Long-term use of biotechnology in the agricultural, food, energy and health sectors is expected to yield a windfall of economic, environmental and social benefits. Already the prototypes of new medicines and of prescription fruit vaccines are available. Gene based agriculture and medicine is increasingly being adopted and accepted. Emerging trends and practices are reflected in the designing of more efficient bioprocesses, and in new research in enzyme and fermentation technology, in the bioconversion of agro industrial residues into bio-utility products, in animal healthcare, and in the bioremediation and medical biotechnologies. Indeed, with each new day, new horizons in biotechnology beckon.

Antibiotic Resistance Mechanisms and New Antimicrobial Approaches Academic Press

Mycotic Keratitis

Nanobiotechnology in Diagnosis, Drug Delivery and Treatment

Therapeutic Medicinal Plants

Cognitive Radio