

Power System Ysis Ashfaq Hussain

This two-volume set LNCS 4805/4806 constitutes the refereed proceedings of 10 international workshops and papers of the OTM Academy Doctoral Consortium held as part of OTM 2007 in Vilamoura, Portugal, in November 2007. The 126 revised full papers presented were carefully reviewed and selected from a total of 241 submissions to the workshops. The first volume begins with 23 additional revised short or poster papers of the OTM 2007 main conferences.

This book presents the state-of-the-art in plant ecophysiology. With a particular focus on adaptation to a changing environment, it discusses ecophysiology and adaptive mechanisms of plants under climate change. Over the centuries, the incidence of various abiotic stresses such as salinity, drought, extreme temperatures, atmospheric pollution, metal toxicity due to climate change have regularly affected plants and, and some estimates suggest that environmental stresses may reduce the crop yield by up to 70%. This in turn adversely affects the food security. As sessile organisms, plants are frequently exposed to various environmental adversities. As such, both plant physiology and plant ecophysiology begin with the study of responses to the environment. Provides essential insights, this book can be used for courses such as Plant Physiology, Environmental Science, Crop Production and Agricultural Botany. Volume 2 provides up-to-date information on the impact of climate change on plants, the general consequences and plant responses to various environmental stresses.

This book presents the latest research findings, methods and development techniques related to Ubiquitous and Pervasive Computing (UPC) as well as challenges and solutions from both theoretical and practical perspectives with an emphasis on innovative, mobile and internet services. With the proliferation of wireless technologies and electronic devices, there is a rapidly growing interest in Ubiquitous and Pervasive Computing (UPC). UPC makes it possible to create a human-oriented computing environment where computer chips are embedded in everyday objects and interact with physical world. It also allows users to be online even while moving around, providing them with almost permanent access to their preferred services. Along with a great potential to revolutionize our lives, UPC also poses new research challenges.

This book introduces readers to industrially important enzymes and discusses in detail their structures and functions, as well as their manifold applications. Due to their selective biocatalytic capabilities, enzymes are used in a broad range of industries and processes. The book highlights selected enzymes and their applications in agriculture, food processing and decoloration, as well as their role in biomedicine. In turn, it discusses biochemical engineering strategies such as enzyme immobilization, metabolic engineering, and cross-linkage of enzyme aggregates, and critically weighs their pros and cons. Offering a wealth of information, and stimulating further research by presenting new concepts on enzymatic catalytic functions in basic and applied contexts, the book represents a valuable asset for researchers from academia and industry who are engaged in

biochemical engineering, microbiology and biotechnology.

Normative Profile, Conflicts and Implementation

On the Move to Meaningful Internet Systems 2007: OTM 2007 Workshops

Recent Trends in Manufacturing and Materials Towards Industry 4.0

The Army and Democracy

Emergence, Status and Impacts

Pollutants from Energy Sources

Mountains, Climate Change, Sustainability and People

In Pakistan at the Crossroads, top international scholars assess Pakistan's politics and economics and the challenges faced by its civil and military leaders domestically and diplomatically. Contributors examine the state's handling of internal threats, tensions between civilians and the military, strategies of political parties, police and law enforcement reform, trends in judicial activism, the rise of border conflicts, economic challenges, financial entanglements with foreign powers, and diplomatic relations with India, China, Iran, Saudi Arabia, Afghanistan, and the United States. In addition to ethnic strife in Baluchistan and Karachi, terrorist violence in Pakistan in response to the American-led military intervention in Afghanistan and in the Federally Administered Tribal Areas by means of drones, as well as to Pakistani army operations in the Pashtun area, has reached an unprecedented level. There is a growing consensus among state leaders that the nation's main security threats may come not from India but from its spiraling internal conflicts, though this realization may not sufficiently dissuade the Pakistani army from targeting the country's largest neighbor. This volume is therefore critical to grasping the sophisticated interplay of internal and external forces complicating the country's recent trajectory. Sustainable agriculture is a rapidly growing field aiming at producing food and energy in a sustainable way for humans and their children. Sustainable agriculture is a discipline that addresses current issues such as climate change, increasing food and fuel prices, poor-nation starvation, rich-nation obesity, water pollution, soil erosion, fertility loss, pest control, and biodiversity depletion. Novel solutions are proposed based on integrated knowledge from sciences as diverse as agronomy, soil science, molecular biology, chemistry, toxicology, ecology, economy, philosophy and social sciences. Because actual society issues are now intertwined, global, and fast-developing, sustainable agriculture will bring solutions to build a safer world. This book series gathers review articles that analyze current agricultural issues and knowledge, then propose alternative solutions. It will therefore help all scientists, decision-makers, professors, farmers and politicians who wish to build a safe agriculture, energy and food system for future generations.

Designed as a text for the undergraduate students of all branches of engineering, this compendium gives an opportunity to learn and apply the popular drafting software AutoCAD in designing projects. The textbook is organized in three comprehensive parts. Part I (AutoCAD) deals with the basic commands of AutoCAD, a popular drafting software used by engineers and architects. Part II (Projection Techniques) contains various projection techniques used in engineering for technical drawings. These techniques have been explained with a number of line diagrams to make them simple to the students. Part III (Descriptive Geometry), mainly deals with 3-D objects that require imagination. The accompanying CD contains the animations using creative multimedia and PowerPoint presentations for all chapters. In a nutshell, this textbook will help students maintain their cutting edge in the professional job market. KEY FEATURES : Explains fundamentals of imagination skill in generic and basic forms to crystallize concepts. Includes chapters on aspects of technical drawing and AutoCAD as a tool. Treats problems in the third angle as well as first angle methods of projection in line with the revised code of Indian Standard Code of Practice for General Drawing.

It is 5 years since the publication of the seminal paper on " Design Science in Information Systems Research " by Hevner, March, Park, and Ram in MIS Quarterly and the initiation of the Information Technology and Systems department of the Communications of AIS. These events in 2004 are markers in the move of design science to the forefront of information systems research. A full cent interval has elapsed since then to allow assessment of from where the field has come and where it should go. Design science research and behavioral science research started as dual tracks when IS was a young eld. By the early 1990s, the influx of behavioral scientists started to dominate the number of design scientists and the eld moved in that direction. By the early 2000s, design people were having difficulty publishing in mainline IS journals and in being tenured in many universities. Yes, an annual Workshop on Information Technology and Systems (WITS) was established in 1991 in conjunction with the International Conference on Information Systems (ICIS) and grew each year. But that was the extent of design science recognition. Fortunately, a revival is underway. By 2009, when this foreword was written, the fourth DESRIST conference has been held and plans are afoot for the 2010 meeting. Design scientists regained respect and recognition in many venues where they previously had little.

Topical and Transdermal Drug Delivery

Frontiers in Plant – Soil Interaction

Selected Articles from IM3F 2020, Malaysia

Alkaloid Chemistry

Proceedings of the AHFE 2021 Virtual Conferences on Human Factors in Software and Systems Engineering, Artificial Intelligence and Social Computing, and Energy, July 25-29, 2021, USA

Problematic Soils and Geoenvironmental Concerns

The Chemistry of Textile Fibres

Ion-exchange Technology I: Theory and Materials describes the theoretical principles of ion-exchange processes. More specifically, this volume focuses on the synthesis, characterization, and modelling of ion-exchange materials and their associated kinetics and equilibria. This title is a highly valuable source not only to postgraduate students and researchers but also to industrial R&D specialists in chemistry, chemical, and biochemical technology as well as to engineers and industrialists.

Science and Technology in Disaster Risk Reduction in Asia: Potentials and Challenges provides both a local and global perspective on how to implement the Sendai Framework for Disaster Risk Reduction. Topics demonstrate the advancement of scientific research as it applies to early warning systems, including identifying risk and the strengthening of infrastructure for different types of hazards. Through different major disasters, it has become evident that there must be a balance between hard and soft technology and physical, process and social solutions. This book demonstrates how this has been successfully implemented in Asia, and how these applications can apply to a global basis. Covers new research on the role of science in Disaster Risk Reduction and lessons learned when research has been applied Utilizes case studies to outline the broader lessons learned Focuses on the Sendai Framework, which was adopted in the Third UN World Conference in 2015

This book constitutes the thoroughly refereed proceedings of the 8th International Congress on Telematics and Computing, WITCOM 2019, held in Merida, Mexico, in November 2019. The 31 full papers presented in this volume were carefully reviewed and selected from 78 submissions. The papers are organized in topical sections: GIS & climate change; telematics & electronics; artificial intelligence & machine learning; software engineering & education; internet of things; and informatics security.

Practical drug development approaches presented by leading experts Designed to support the development of new, effective therapeutics. Topical and Transdermal Drug Delivery: Principles and Practice explains the principles underlying the field and then demonstrates how these principles are put into practice in the design and development of new drug products. Drawing together and reviewing the latest research findings, the book focuses on practical, tested, and proven approaches that are backed by industry case studies and the authors' firsthand experience. Moreover, the book emphasizes the mechanistic information that is essential for successful drug product development. Topical and Transdermal Drug Delivery: Principles and Practice is divided into two parts: Part One, Current Science, Skin Permeation, and Enhancement Approaches, offers readers a fundamental understanding of the underlying science in the field. It describes the principles and techniques needed to successfully perform experimental approaches, covering such issues as skin permeation, enhancement and assessment. Part Two, Topical and Transdermal Drug Development, guides readers through the complete product development process from concept to approval, offering practical tips and cautions from experts in the field. This part also discusses regulations that are specific to the development of dermal drug products. The final chapter explores current and future trends, forecasting new development techniques and therapeutics. Throughout the book, the authors clearly set forth the basic science and experimental procedures, making it possible for researchers to design their own experimental approaches and accurately interpret their results. With contributions from experienced drug researchers, this text is highly recommended for all researchers involved in topical and transdermal product development who need to know both the state of the science and the standards of practice.

8th International Congress, WITCOM 2019, Merida, Mexico, November 4 – 8, 2019, Proceedings

Domestic Dynamics and External Pressures

Ion Exchange Technology I

Natural Products Isolation

Mechanisms of Adaptation and Stress Amelioration

Design Research in Information Systems

Plant Ecophysiology and Adaptation under Climate Change: Mechanisms and Perspectives II

This book includes the proceedings of the 15th International Conference on Complex, Intelligent, and Software Intensive Systems, which took place in Asan, Korea, on July 1–3, 2021. Software intensive systems are systems, which heavily interact with other systems, sensors, actuators, devices, and other software systems and users. More and more domains are involved with software intensive systems, e.g., automotive, telecommunication systems, embedded systems in general, industrial automation systems, and business applications. Moreover, the outcome of web services delivers a new platform for enabling software intensive systems. Complex systems research is focused on the overall understanding of systems rather than its components. Complex systems are very much characterized by the changing environments in which they act by their multiple internal and external interactions. They evolve and adapt through internal and external dynamic interactions. The development of intelligent systems and agents, which is each time more characterized by the use of ontologies and their logical foundations build a fruitful impetus for both software intensive systems and complex systems. Recent research in the field of intelligent systems, robotics, neuroscience, artificial intelligence, and cognitive sciences is very important factor for the future development and innovation of software intensive and complex systems. The aim of the book is to deliver a platform of scientific interaction between the three interwoven challenging areas of research and development of future ICT-enabled applications: Software intensive systems, complex systems, and intelligent systems.

This book discusses different aspects of energy consumption and environmental pollution, describing in detail the various pollutants resulting from the utilization of natural resources and their control techniques. It discusses diagnostic techniques in a simple and easy-to-understand manner. It will be useful for engineers, agriculturists, environmentalists, ecologists and policy makers involved in area of pollutants from energy, environmental safety, and health sectors.

This book takes stock of micro irrigation systems (MIS), the technological intervention in India's agricultural and water management sectors, over the past couple of decades. Based on empirical research from the major agriculturally dynamic states, viz., Gujarat, Rajasthan, Maharashtra, Tamil Nadu, Andhra Pradesh and Karnataka, the book provides a nuanced understanding and objective assessment of the current status and adoption of MIS across these states. It addresses several of the questions related to adoption and impacts of MIS in India. On the adoption side, the key question that the book addresses is which segment of the farming community adopts MIS across states? The impacts analysed include those on physical, agronomic and economic aspects. At the macro level, the question being asked is about the future potential of MIS in terms of saving water from agriculture and making more water available for environment. The book also addresses the question of the positive/negative externalities and real social benefits and costs from the use of MIS, a major justification for heavy capital subsidies for its purchase by farmers. It also brings out certain critical concerns pertaining to MIS adoption, which need to be addressed through more empirical research based on longitudinal panel/ cross sectional data. The book would be of great use to researchers (agricultural water management, irrigation economics), students of water resource engineering, irrigation engineering and water resources management, as well as to policy makers and agricultural water management experts – national and international.

The conventional solvents used in chemical, pharmaceutical, biomedical and separation processes represent a great challenge to green chemistry because of their toxicity and flammability. Since the beginning of " the 12 Principles of Green Chemistry " in 1998, a general effort has been made to replace conventional solvents with environmentally benign substitutes. Water has been the most popular choice so far, followed by ionic liquids, surfactant, supercritical fluids, fluoruous solvents, liquid polymers, bio-solvents and switchable solvent systems. Green Solvents Volume I and II provides a throughout overview of the different types of solvents and discusses their extensive applications in fields such as extraction, organic synthesis, biocatalytic processes, production of fine chemicals, removal of pollutants, biochemical transformations, composite material, energy storage devices and polymers. These volumes are written by leading international experts and cover all possible aspects of green solvents' properties and applications available in today's literature. Green Solvents Volume I and II is an invaluable guide to scientists, R&D industrial specialists, researchers, upper-level undergraduates and graduate students, Ph.D. scholars, college and university professors working in the field of chemistry and biochemistry.

Innovations and Implementations of Computer Aided Drug Discovery Strategies in Rational Drug Design

Green Solvents II

Society and Politics of Jammu and Kashmir

ENGINEERING GRAPHICS WITH AUTOCAD

Theory and Materials

Telematics and Computing

Pakistan at the Crossroads

Kashmir is one of the longest-standing conflicts yet to be resolved by the international community. In 2000, Bill Clinton declared it the most dangerous place in the world and since then the situation continues to escalate. Positioned between India, Pakistan and China – three nuclear powers – Kashmir is the most militarized zone on the planet. Against this backdrop, the urgency to understand what Jammu and Kashmir means to those who actually belong to its territory has increased. This book not only helps readers navigate subtleties in a complex part of the world but is the first of its kind – written for a global audience from local perspectives, which to date have been sorely lacking.

Very much characterized by the changing environments in which they act by their multiple internal and external interactions. They evolve and adapt through internal and external dynamic interactions. The development of intelligent systems and agents, which is each time more characterized by the use of ontologies and their logical foundations build a fruitful impetus for both software intensive systems and complex systems. Recent research in the field of intelligent systems, robotics, neuroscience, artificial intelligence, and cognitive sciences is very important factor for the future development and innovation of software intensive and complex systems. The aim of the book is to deliver a platform of scientific interaction between the three interwoven challenging areas of research and development of future ICT-enabled applications: Software intensive systems, complex systems, and intelligent systems.

This book addresses emerging issues concerning the integration of artificial intelligence systems in our daily lives. It focuses on the cognitive, visual, social and analytical aspects of computing and intelligent technologies, and highlights ways to improve the acceptance, effectiveness, and efficiency of said technologies. Topics such as responsibility, integration and training are discussed throughout. The book also reports on the latest advances in systems engineering, with a focus on societal challenges and next-generation systems and applications for meeting them. Further, it covers some cutting-edge issues in energy, including intelligent control systems for power plant, and technology acceptance models. Based on the AHFE 2021 Conferences on Human Factors in Software and Systems Engineering, Artificial Intelligence and Social Computing, and Energy, held virtually on 25–29 July, 2021, from USA, this book provides readers with extensive information on the current research and future challenges in these fields, together with practical insights into the development of innovative services for various purposes.

The Hindu Kush Himalaya Assessment

Applications of Ion Exchange Materials in Biomedical Industries

Power System Analysis

Biocatalysis

Techno-Societal 2018

Innovative Mobile and Internet Services in Ubiquitous Computing

Modern Power System Analysis

This is the first book to analyze in depth the current causes of shortage of family physicians and the relative weakness of the family practice model in many countries in the Eastern Mediterranean Region. Focusing on engagement with the private health sector in scaling up family practice, the book explores why primary health care can make the difference and how it can be introduced and strengthened. Comparative experiences from around the world put the EMR in context, while the book also highlights where the EMR is special – in particular, the burden for health care of refugees and displaced persons, and the need of public-private partnerships.

Plants face a wide range of environmental challenges, which are expected to become more intense as a result of global climate change. Plant-soil interactions play an important role in the functioning of ecosystems. Soil properties represent a strong selection pressure for plant diversity and influence the structure of plant communities and biodiversity. The complexity of plant-soil interactions has recently been studied by developing a trait-based approach in which responses and effects of plants on soil environment are quantified and modelled. This fundamental research on plant-soil interaction in ecosystems is essential to transpose knowledges of functional ecology to environmental management. Frontiers in Plant-Soil Interaction: Molecular Insights into Plant Adaptation will address topics that provide advances in understanding plant responses to soil conditions through the integration of genetic, molecular, and plant-level studies of diverse plant species, removal of pollutants, biochemical transformations, composite material, energy storage devices and polymers. These volumes are written by leading international experts and cover all possible aspects of green solvents' properties and applications available in today's literature. Green Solvents Volume I and II is an invaluable guide to scientists, R&D industrial specialists, researchers, upper-level undergraduates and graduate students, Ph.D. scholars, college and university professors working in the area of plant-environment interaction and shares their research

Resisting Occupation in Kashmir considers the social and legal dimensions of India's occupation of Kashmir and the ways in which Kashmiri youth are drawing on the region's history of armed rebellion to reimagine the freedom struggle in the twenty-first century.

Alkaloids, represent a group of interesting and complex chemical compounds, produced by the secondary metabolism of living organisms in different biotopes. They are relatively common chemicals in all kingdoms of living organisms in all environments. Two hundred years of scientific research has still not fully explained the connections between alkaloids and life. Alkaloids-Chemistry, Biological Significance, Applications and Ecological Role provides knowledge on structural typology, biosynthesis and metabolism in relation to recent research work on alkaloids. Considering an organic chemistry approach to alkaloids using basic biological and ecological explanation. Within the book several questions that persist in this field of research are approached as are some unresearched areas. The book provides beneficial text for an academic and professional audience and serves as a source of knowledge for anyone who is interested in the fascinating subject of alkaloids. Each chapter features an abstract. Appendices are included, as are a listing of alkaloids, plants containing alkaloids and some basic protocols of alkaloid analysis. * Presents the ecological role of alkaloids in nature and ecosystems * Interdisciplinary and reader friendly approach * Up-to-date knowledge

Science and Technology in Disaster Risk Reduction in Asia

Advances in Artificial Intelligence, Software and Systems Engineering

Resisting Occupation in Kashmir

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

Airpower in the Libyan Civil War

Characterization and Control

Alkaloid Chemistry, Biological Significance, Applications and Ecological Role

This is an introduction to power system analysis and design. The text contains fundamental concepts and modern topics with applications to real-world problems, and integrates MATLAB and SIMULINK throughout.

Textiles are ubiquitous materials that many of us take for granted in our everyday lives. We rely on our clothes to protect us from the environment and use them to enhance our appearance. Textiles also find applications in transport, healthcare, construction, and many other industries. The revised and updated 2nd Edition of The Chemistry of Textile Fibres highlights the trend towards the synthesis, from renewable resources, of monomers for making synthetic fibres. It contains new information on the influence of legislation and the concerns of environmental organisations on the use of chemicals in the textile industry. New sections on genetically modified cotton, anti-microbial materials and spider silk have been added as well as a new chapter covering functional fibres and fabrics. This book provides a comprehensive overview of the various types of textile fibres that are available today, ranging from natural fibres to the high-performance fibres that are very technologically advanced. Readers will gain an appreciation of why particular types of fibre are used for certain applications through understanding the chemistry behind their properties. Students following 'A' level courses or equivalent and first-year undergraduate students reading textile technology subjects at university will find this book a valuable source of information.

In sharp contrast to neighboring India, the Muslim nation of Pakistan has been ruled by its military for over three decades. The Army and Democracy identifies steps for reforming Pakistan's armed forces and reducing its interference in politics, and sees lessons for fragile democracies striving to bring the military under civilian control.

Between March and October 2011, a coalition of North Atlantic Treaty Organization (NATO) member states and several partner nations waged a war against Muammar Qaddafi's Libyan regime that stemmed and then reversed the tide of Libya's civil war, preventing Qaddafi from crushing the nascent rebel movement seeking to overthrow his dictatorship and going on to enable opposition forces to prevail.

The central element of this intervention was a relatively small multinational force's air campaign operating from NATO bases in several countries, as well as from a handful of aircraft carriers and amphibious ships in the Mediterranean Sea. The study details each country's contribution to that air campaign, examining such issues as the limits of airpower and coordination among nations. It also explores whether the Libyan experience offers a potential model for the future.

Military Politics in Pakistan

Micro Irrigation Systems in India

Potentials and Challenges

Family Practice in the Eastern Mediterranean Region WHO HB SPECIAL EDITION

Healthcare as a Human Rights Issue

Management Techniques for Employee Engagement in Contemporary Organizations

OTM Confederated International Workshops and Posters, AWeSOME, CAMS, OTM Academy Doctoral Consortium, MONET, OnToContent, ORM, PerSys, PPN, RDDS, SWS, and SWSW 2007, Vilamoura, Portugal, November 25-30, 2007, Proceedings

Engaged employees are assets to every company because they are not only more productive but are also open to new ideas and technologies that often lead to significant business outcomes. Businesses need to establish credible antecedents to employee engagement based on their own culture and needs to develop a pool of highly engaged employees. Management Techniques for Employee Engagement in Contemporary Organizations provides theoretical frameworks and the latest empirical research findings on management strategies for the promotion, adoption, and implementation of work engagement policies. The content within this publication examines gamification, employee engagement, and management techniques and is designed for academicians, managers, business professionals, human resources officers, policymakers, and researchers.

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 experts-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.

Natural Products Isolation: Second Edition presents a practical overview of just how natural products can be extracted, prepared, and isolated from the source material. Maintaining the main theme and philosophy of the first edition, this second edition incorporates all the new significant developments in this field of research. The chapters are divided into four distinct sections: introduction, extraction,

chromatography, and special topics. This second edition provides substantial background information for natural product researchers and will prove a useful reference guide to all of the available techniques.

Universal Health Coverage and Quality Primary Care

Enzymatic Basics and Applications

Proceedings of the 12th International Conference on Innovative Mobile and Internet Services in Ubiquitous Computing (MIS-2018)

Theory and Practice

Complex, Intelligent and Software Intensive Systems

Precision and Purpose

A Text Book of Engineering Drawing

This book presents the applications of ion-exchange materials in the biomedical industries. It includes topics related to the application of ion exchange chromatography in determination, extraction and separation of various compounds such as amino acids, morphine, antibiotics, nucleotides, penicillin and many more. This title is a highly valuable source of knowledge on ion-exchange materials and their applications suitable for postgraduate students and researchers but also to industrial R&D specialists in chemistry, chemical, and biochemical technology. Additionally, this book will provide an in-depth knowledge of ion-exchange column and operations suitable for engineers and industrialists.

This book deals with various facets of the human right to health: its normative profile as a universal right, current political and legal conflicts and contextualized implementation in different healthcare systems. The authors come from different countries and disciplines - law, political science, ethics, medicine etc. - and bring together a broad variety of academic and practical perspectives. The volume contains selected contributions of the international conference "The Right to Health - An Empty Promise?" held in September 2015 in Berlin and organized by the Emerging Field Initiative Project "Human Rights in Healthcare" (University of Erlangen-Nürnberg).

This open access volume is the first comprehensive assessment of the Hindu Kush Himalaya (HKH) region. It comprises important scientific research on the social, economic, and environmental pillars of sustainable mountain development and will serve as a basis for evidence-based decision-making to safeguard the environment and advance people's well-being. The compiled content is based on the collective knowledge of over 300 leading researchers, experts and policymakers, brought together by the Hindu Kush Himalayan Monitoring and Assessment Programme (HIMAP) under the coordination of the International Centre for Integrated Mountain Development (ICIMOD). This assessment was conducted between 2013 and 2017 as the first of a series of monitoring and assessment reports, under the guidance of the HIMAP Steering Committee: Eklabya Sharma (ICIMOD), Atiq Raman (Bangladesh), Yuba Raj Khatriwada (Nepal), Linxiu Zhang (China), Surendra Pratap Singh (India), Tandong Yao (China) and David Molden (ICIMOD and Chair of the HIMAP SC). This First HKH Assessment Report consists of 16 chapters, which comprehensively assess the current state of knowledge of the HKH region, increase the understanding of various drivers of change and their impacts, address critical data gaps and develop a set of evidence-based and actionable policy solutions and recommendations. These are linked to nine mountain priorities for the mountains and people of the HKH consistent with the Sustainable Development Goals. This book is a must-read for policy makers, academics and students interested in this important region and an essentially important resource for contributors to global assessments such as the IPCC reports.

This book presents various computer-aided drug discovery methods for the design and development of ligand and structure-based drug molecules. A wide variety of computational approaches are now being used in various stages of drug discovery and development, as well as in clinical studies. Yet, despite the rapid advances in computer software and hardware, combined with the exponential growth in the available biological information, there are many challenges that still need to be addressed, as this book shows. In turn, it shares valuable insights into receptor-ligand interactions in connection with various biological functions and human diseases. The book discusses a wide range of phylogenetic methods and highlights the applications of Molecular Dynamics Simulation in the drug discovery process. It also explores the application of quantum mechanics in order to provide better accuracy when calculating protein-ligand binding interactions and predicting binding affinities. In closing, the book provides illustrative descriptions of major challenges associated with computer-aided drug discovery for the development of therapeutic drugs. Given its scope, it offers a valuable asset for life sciences researchers,

medicinal chemists and bioinformaticians looking for the latest information on computer-aided methodologies for drug development, together with their applications in drug discovery.

Control and Operation of Grid-Connected Wind Energy Systems

Principles and Practice

Proceedings of IGC 2018

Alkaloids - Secrets of Life:

Molecular Insights into Plant Adaptation

Properties and Applications of Ionic Liquids

This book presents part of the proceedings of the Manufacturing and Materials track of the IM3F 2020 conference held in Malaysia. This collection of articles deliberates on the key challenges and trends related to manufacturing as well as materials engineering and technology in setting the stage for the world in embracing the fourth industrial revolution. It presents recent findings with regards to manufacturing and materials that are pertinent towards the realizations and ultimately the embodiment of Industry 4.0, with contributions from both industry and academia.

American Doctoral Dissertations

Proceedings of the 15th International Conference on Complex, Intelligent and Software Intensive Systems (CISIS-2021)