

Registration 2014 At Ithemba Nursing College College

An unfortunate by-product of industrialization is the contamination of soil and water resources with toxic metals, which becomes an environmental concern when the concentration in soils begins to affect human health. Current remediation methods applicable to contaminated soils are expensive and environmentally invasive since they are based primarily on civil-engineering techniques. This book represents an overview of efforts in exploting biological and chemical processes to reduce the inherent risk associated with metal-contaminated soils. It presents a comprehensive, up-to-date analysis of in situ immobilization and inactivation of toxic metals by means of plants, microorganisms and invertebrates.

This unique book presents original research from the largest cross-national survey of the epidemiology of mental disorders ever conducted. It provides the latest findings from the WHO World Mental Health Surveys based on interviews of nearly 150,000 individuals in twenty-six countries on six continents. The book is ordered by specific disorder, with individual chapters dedicated to presenting detailed findings on the prevalence, onset timing, sociodemographic profile, comorbidity, associated impairment and treatment for eighteen mental disorders. There is also discussion of important cross-national consistencies in the epidemiology of mental disorders and highlighting of intriguing patterns of cross-national variation. This is one of the most comprehensive summaries of the epidemiology of mental disorders ever published, making this an invaluable resource for researchers, clinicians, students and policy-makers in the fields of mental and public health.

Cervical cancer and breast cancer are two of the most common cancers found in women. Cervical cancer is when cancer arises from the cervix. Early on there are typically no symptoms. Later symptoms may include abnormal vaginal bleeding, pelvic pain or pain during sex. Breast cancer is when cancer develops from breast tissue. Signs of breast cancer may include a lump in the breast, a change in breast shape, dimpling of the skin, fluid coming from the nipple, or a red scaly patch of skin. Prostate cancer develops in the prostate, a gland in male reproductive system. It may initially cause no symptoms. In later stages it can cause difficulty urinating, blood in the urine, or pain in the pelvis, back or when urinating. This book provides some latest research and findings on breast cancer, cervical cancer and prostate cancer. The aim of this book is to serve as an important reference book for individuals working in biomedical laboratories, and for clinical professionals. There are totally 13 chapters in this book. Chapter 1 proposes an outlook on different endoscopic surgical procedures to treat cervical cancer, using traditional laparoscopy and robotics. Chapter 2 reviews the clinical results of carbon ion radiotherapy (C-ion RT) for uterine cervical cancer. Carbon-ion RT has been established as a safe short-term treatment for locally advanced uterine cervical cancer. Chapter 3 summarises chrysin inhibits proliferation, induces apoptosis and reduce angiogenesis in most tested cancer cells, including cervical cancer cells. Chapter 4 shows that involving physicians in the promotion of public health programs and initiatives is a viable option. Chapter 5 summarizes the published findings about the controversial role of METCAM, a cell adhesion molecule, in the progression of human breast cancer. Chapter 6 focuses on the biology of "neu" in breast cancer - the potential mechanisms that may contribute to tumor resistance and the numerous uncertainties that persist despite the bona-fide progress made in treating this particular subtype of breast cancer. Chapter 7 describes the mechanisms by which estrogen can exert its role in estrogenresponsive cells, focusing on specific aspects of estrogen receptor signaling. Moreover, this chapter shows how some of the proteins involved in estrogen receptor signaling can be used as predictive markers in breast cancer and describes a proposed clinical study related to the combined use of two drugs (bortezomib and tamoxifen) as therapeutic agents for estrogen receptor negative breast cancers. Chapter 8 summarizes the recent studies indicating that Angll facilitates breast cancer metastasis by contributing to the cross-talk between cancer cells and the host stroma. Chapter 9 focuses on a rationale pharmaceutical development along with a detailed understanding of biological effects so as to accelerate the incorporation of nanocarriers in breast cancer therapy. Chapter 10 summarizes the mTOR pathway and the clinical results in breast cancer treatment, relating them to results obtained using cultured MCF-7 breast cancer tamoxifen resistant sublines. Chapter 11 discusses how to develop a standard extraction method, yielding tomato products which are suitable for cell cultures, and enable product comparison of different tomato varieties. Chapter 12 describes principles and processes that are involved in investigating biological or clinical problems with nuclear magnetic resonance (NMR) based metabolomics - an approach that involves the global analysis of metabolites. The authors use prostate cancer as a case study to outline the processes, applications and potential of metabolomics for inform scientists and clinicians. Chapter 13 discusses the epidemiology, screening, diagnosis and treatment options of prostate cancer and its association with osteoporosis.

The Reform of Governance is a translated collection of articles providing a look at how scholars in China have been assessing their country's recent governmental history. This volume, as well as the others in the SSRC series, provide western scholars with an accessible English language look at the state of current scholarship in China on the interplay of the country's Democratic reforms, electoral rules, accountability and social welfare.

Emerging Monitoring and Remediation Strategies

Anorexics and Bulimics Anonymous

Cervical, Breast and Prostate Cancer (Black and White)

Mechanisms, Modeling, Biological Effects, International Standards, Exposure Criteria

How to Work with People You Don't Agree with or Like or Trust

Principles, Practices and Procedures

Brush Border Membranes

This handbook provides a comprehensive review of the entire field of laser micro and nano processing, including not only a detailed introduction to individual laser processing techniques but also the fundamentals of laser-matter interaction and lasers, optics, equipment, diagnostics, as well as monitoring and measurement techniques for laser processing. Consisting of 11 sections, each composed of 4 to 6 chapters written by leading experts in the relevant field. Each main part of the handbook is supervised by its own part editor(s) so that high-quality content as well as completeness are assured. The book provides essential scientific and technical information to researchers and engineers already working in the field as well as students and young scientists planning to work in the area in the future. Lasers found application in materials processing practically since their invention in 1960, and are currently used widely in manufacturing. The main driving force behind this fact is that the lasers can provide unique solutions in material processing with high quality, high efficiency, high flexibility, high resolution, versatility and low environmental load. Macro-processing based on thermal process using infrared lasers such as CO2 lasers has been the mainstream in the early stages, while research and development of micro and nano-processing are becoming increasingly more active as short wavelength and/or short pulse width lasers have been developed. In particular, recent advances in ultrafast lasers have opened up a new avenue to laser material processing due to the capabilities of ultrahigh picosecond- and nanofabrication of diverse materials. This handbook is the first book covering the basics, the state-of-the-art and important applications of the dynamic and rapidly expanding discipline of laser micro- and nanoengineering. This comprehensive source makes readers familiar with a broad spectrum of approaches to solve all relevant problems in science and technology. This handbook is the ultimate desk reference for all people working in the field.

Health and healthcare in South Africa attempts to capture the essence of transformation and trends in the South African health sector. It offers, on the one hand, an overview of recent and current developments in the South African health care system, and on the other, of trends in the health status of the South African population. The book is a follow-up to the well-known Health care in South Africa - structure and dynamics (Van Rensburg, Fourie & Pretorius 1992), published just before the transition to a democratic society. The book retains a strong historical thread, but the focus is generally on the nature of the transformation process, gains made and failures encountered.

Collaboration is increasingly difficult and increasingly necessary Often, to get something done that really matters to us, we need to work with people we don't agree with or like or trust. Adam Kahane has faced this challenge many times, working on big issues like democracy and jobs and climate change and on everyday issues in organizations and families. He has learned that our conventional understanding of collaboration—that it requires a harmonious team that agrees on where it's going, how it's going to get there, and who needs to do what—is wrong. Instead, we need a new approach to collaboration that embraces discord, experimentation, and genuine cocreation—which is exactly what Kahane provides in this groundbreaking and timely book.

The University of the South Africa has, in the space of nearly two decades, experienced a massive memory boom, manifest in a plethora of new memorials and museums and in the renaming of streets, buildings, cities and more across the country. This memorialisation is intricately linked to questions of power, liberation and public history in the making and remaking of the South African nation. Ali Khangela Hlongwane and Sifiso Mxolisi Ndlovu analyse an array of these liberation heritage sites, including the Hector Pieterson Memorial and Museum, the June 16, 1976 Interpretation Centre, the Apartheid Museum and the Mandela House Museum, foregrounding the work of migrant workers, architects, visual artists and activists in the practice of memorialisation. As they argue, memorialisation has been integral to the process of state and nation formation from the pre-colonial era through the present day.

A faith based 12 Step program... Directed toward those trapped in the labyrinth of eating disorders, their families, and their therapists, the text lays out in detail the steps taken, the tools used, the love that grew and the healing received. Illustrated with true-life experience and complete with a compilation of personal stories by individual members.

Femtosecond Laser Micromachining

Die Suid-Afrikaanse wiskunde-olimpiade

Collaborating with the Enemy

The University of the Future

Promoting Inclusion in Education Abroad

Children who sexually abuse other children - A South African Perspective

Global Perspectives on the Epidemiology of Mental Disorders

Reporting new results, this book covers the subject of biological effects of EMF in its entirety. Experimental verification of the theoretical results is given when at all possible, and the book is expected to open new areas of research, providing material for university course creation.

This book is a comprehensive guide to radiopharmaceutical chemistry. The stunning clinical successes of nuclear imaging and targeted radiotherapy have resulted in rapid growth in the field of radiopharmaceutical chemistry, an essential component of nuclear medicine and radiology. However, at this point, interest in the field outpaces the academic and educational infrastructure needed to train radiopharmaceutical chemists. For example, the vast majority of texts that address radiopharmaceutical chemistry do so only peripherally, focusing instead on nuclear chemistry (i.e. nuclear reactions in reactors), heavy element radiochemistry (i.e. the decomposition of radioactive waste), or solely on the clinical applications of radiopharmaceuticals (e.g. the use of PET tracers in oncology). This text fills that gap by focusing on the chemistry of radiopharmaceuticals, with key coverage of how that knowledge translates to the development of diagnostic and therapeutic radiopharmaceuticals for the clinic. The text is divided into three overarching sections: First Principles, Radiochemistry, and Special Topics. The first is a general overview covering fundamentals and broad issues like "The Production of Radionuclides" and "Basics of Radiochemistry". The second section is the main focus of the book. In this section, each chapter's author will delve much deeper into the subject matter, covering both well established and state-of-the-art techniques in radiopharmaceutical chemistry. This section will be divided according to radionuclide and will include chapters on radiolabeling methods using all of the common nuclides employed in radiopharmaceuticals, including four chapters on the ubiquitously used fluorine-18 and a "Best of the Rest" chapter to cover emerging radionuclides. Finally, the third section of the book is dedicated to special topics with important information for radiochemists, including "Bioconjugation Methods," "Click Chemistry in Radiochemistry," and "Radiochemical Instrumentation." This is an ideal educational guide for nuclear medicine physicians, radiologists, and radiopharmaceutical chemists, as well as residents and trainees in all of these areas.

This book (vol. 1) presents the proceedings of the IUPESM World Congress on Biomedical Engineering and Medical Physics, a triennially organized joint meeting of medical physicists, biomedical engineers and adjoining health care professionals. Besides the purely scientific and technological topics, the 2018 Congress will also focus on other aspects of professional involvement in health care, such as education and training, accreditation and certification, health technology assessment and patient safety. The IUPESM meeting is an important forum for medical physicists and biomedical engineers in medicine and healthcare learn and share knowledge, and discuss the latest research outcomes and technological advancements as well as new ideas in both medical physics and biomedical engineering field.

An adult has 206 bones in their body, but the skeletal system includes much more than these bones. It also includes cartilage, ligaments, and tendons, altogether making up about one-fifth of a human's total body weight. Your readers will learn about this incredible system that is the framework of their bodies. Eye-catching photographs correlate closely with engaging, accessible text, encouraging a deeper understanding of the key scientific concepts discussed. Concise fact boxes present additional information in separate, manageable sections.

A Handbook of Research and Practice

Radiopharmaceutical Chemistry

1700 to the Present

A Complex Review of Current Hot Topics and their Applications

In Situ Inactivation and Phytorestoration

Voices of Resilience

Handbook of Laser Micro- and Nano-Engineering

Femtosecond laser micromachining of transparent material is a powerful and versatile technology. In fact, it can be applied to several materials. It is a maskless technology that allows rapid device prototyping, has intrinsic three-dimensional capabilities and can produce both photonic and microfluidic devices. For these reasons it is ideally suited for the fabrication of complex microsystems with unprecedented functionalities. The book is mainly focused on micromachining of transparent materials which, due to the nonlinear absorption mechanism of ultrashort pulses, allows unique three-dimensional capabilities and can be exploited for the fabrication of complex microsystems with unprecedented functionalities.This book presents an overview of the state of the art of this rapidly emerging topic with contributions from leading experts in the field, ranging from principles of nonlinear material modification to fabrication techniques and applications to photonics and optofluidics.

An authoritative, state-of-the-art collection that brings together key experts to provide an overview of the field. This new paperback edition includes 3 new chapters on human resources and health, end-of-life care and complementary and alternative medicine as well as thorough updates to the introduction and conclusion.

These surveys provide valuable information for physicians and health policy planners and provide greater clarity on the global impact of mental illness and its undertreatment."--BOOK JACKET.

Co-published with White education abroad - including studying, volunteering, researching, and interning abroad - is increasingly emphasized as a critical factor in preparing undergraduates for a globally interconnected world, diversifying the pool of participants in such activities has proven challenging. Framed within the concept of "inclusive excellence" with the objective of promoting diversity, inclusion, and equity in higher education as foundational to educational excellence, the contributors present research and practices that have been proven successful in improving participation among groups of students traditionally underrepresented in education abroad. Broader participation in education abroad programming has been a perennial concern at numerous higher education institutions in the U.S., having prompted countless discussions in professional organizations and across campuses among faculty, staff, and students. Many have come to recognize that overseas opportunities are no longer a luxury and instead are a necessity for job seekers entering a more diverse, globally interconnected workplace. The volume offers a combination of research-based chapters and case studies from leading experts on the barriers that disproportionately impact specific groups of students, including: students with disabilities; first-generation college students; undocumented students; racial and ethnic minorities; science, technology, engineering, and mathematics (STEM) majors; and males. The authors illuminate the issues which may inhibit education abroad participation, from individual to institutional, and present strategies reflecting a broad range of institutional contexts, resources, and needs. While there has been significant discussion and action to promote broader inclusion in education abroad, this is the first volume focusing on research and practice to achieve these ends, and is intended as a critical resource for practitioners and scholars alike.

The Skeletal System

June 3-8, 2018, Prague, Czech Republic (Vol.1)

Global Tuberculosis Report 2017

The Scientific Imagination In South Africa

Public History and Culture in South Africa

Medical Radiation Physics

The Reform of Governance

In the past few years, there has been a considerable increase in the number of new and emerging pollutants in the limited water resources around the world, posing a serious threat to human health and the ecosystems. These pollutants, which are also referred to as new chemicals without regulatory status, are poorly understood and therefore not properly monitored or effectively removed from wastewater using conventional methods. Relevant topics addressing these challenges are presented in this book containing 12 chapters, which are consequently divided into two sections (Section 1: Pollutants in Wastewater and Section 2: Wastewater Remediation Strategies). The first section provides a systematic review of recent detection methods suitable for the rapid and accurate identification of some emerging pollutants from wastewater. Further development in the book fairly complement the first part by providing solutions for the removal of the emerging pollutants from wastewater and restoration of usable water; innovative approaches encompassing inter-disciplinary processes supported by sustainable technologies are therefore the focus of the second part of the book. The enhancement of bioreactor systems with consideration of volumetric organic loads, membrane configurations and reactor types has been highlighted by authors as strategies to ensure increased biomass proliferation, high effluent production rates and high quality effluents. The development of smart materials for pollutants removal from wastewater being a promising trend for remediation of water pollution, could not be ignored in this book, which aims to emphasize on the latest sustainable and effective technologies. This has been taken care in a few chapters which that explore the synthesis of nanocomposite for various applications; in one, the synthesis of nanocomposite hydrogels (NCHs) has been contemplated to produce adsorbents with improved thermomechanical, electrical, optical, swelling properties and adsorption capacity contrasted with the traditional polymeric hydrogel; while a separate chapter covers a brilliant approach consisting to combine nanoparticles, carbon nanotubes and organic polymers to develop effective antimicrobial compounds with the potential to exhibit microbicidal activities against bacteria and fungi. The ability to predict and assess the performance of the treatment process is very important to ensure that the system remains effective. This is the topic of two chapters that cover the use of models to predict the feasibility of reactions and the structural suitability of adsorbents. The book therefore covers a complete set of information for an inter-disciplinary approach to wastewater monitoring and treatment.

Meningiomas, the most common of intracranial tumors, are characterized by a protean range of possible locations and appearances, due to their origin from the extensive and intricately formed meninges. As such, a wide variety of differential diagnoses is typical, and the therapies chosen are necessarily highly variable. The introductory chapters of this book cover the pathology of these tumors, the evolution of special surgical methods, instrumentation, intraoperative monitoring, and the role of radiosurgery. Ten surgical chapters cover the individual regions of occurrence, including the sphenoid wing, olfactory groove, cerebellopontine angle, etc., all of which require a specialized approach and therapeutic strategy. Key Features: Discussion of pathology and tumor organized by anatomic location of the lesions with the goal of providing best patient outcomes New WHO meningioma classification system based on most recent research in growth patterns, gene sequencing, and molecular patterns of development Important updates on the newest developments in treatment modalities for meningioma, including the lesser invasive radiotherapy and radiosurgery for the smaller lesions and to avoid the necessity of performing radical surgery Meningiomas of the Skull Base: Treatment Nuances in Contemporary Neurosurgery is an essential reference guide for neurosurgeons and neurologists (in training and in practice) and will also be welcomed by skull base surgeons and otolaryngologists.

This book aims to examine multiple literary texts and works by applying various cultural and literary theories & criticism. The application of these theories helps in deciphering novel meanings and understanding of the textual elements. The book encompasses texts and articles from the literary canon as well as contemporary literature from around the world which offer a broader perspective on the interaction between various socio-cultural elements that shape literary works. It aims to understand the formation of new meanings and paradigms that emerge out these literary analyses and reviews. This book is a great resource for all the students, academicians and critics who are looking for recent perspectives on different literary texts and works.

The current work consists of nine contributions describing recent progress in the interdisciplinary of Nanoscience, which involves physics, chemistry, engineering, biology and medicine and one essay outlining some important historical and socioeconomic factors pertaining to recent developments in nanoscale science and technology. All 10 chapters have been written by eminent experts in their respective fields. The authors employ the terms 'nanomaterials' as building blocks of a range of materials, 'nanoarchitecture' represents the design and 'nanotechnology' the means to produce a particular device or functionality. Two of the chapters are devoted to novel materials and two others focus on analyzing techniques, which can be used to enable molecular control of the film architecture. Additionally, the reader will find material devoted to photonic and hybrid plasmonic-photonic crystals as well as sections which address their applications, such as the use of plasmonic particles and nanostructures for new sensing concepts and ultrasensitive detection techniques. This work will be of interest to graduate students, researchers and practitioners alike.

Mental Disorders Around the World

Meningiomas of the Skull Base

Facts and Figures from the WHO World Mental Health Surveys

Applied Bioinformatics

The WHO World Mental Health Surveys

The Innovative University

An Introduction

An innovative three hundred year exploration of the social and political contexts of science and the scientific imagination in South Africa.

Carbon Dioxide Sequestration in Cementitious Construction Materials provides an updated, state-of-the-art review on the development of cementitious construction materials based on carbon dioxide storage, which will have a major eco-efficient and economic benefit for the construction industry. Key chapters include methods for the assessment of carbon dioxide absorbed by cementitious materials, air and water-based carbon dioxide storage, carbon dioxide storage modeling, carbonation mechanisms, carbon dioxide storage on recycled aggregates, case, calcium, sodium and magnesium-based binders, properties and the durability of carbon dioxide based concrete. Promotes the importance of CO2 storage in carbonation of these materials, especially reincorporation of CO2 during fabrication Discusses a wide range of cementitious materials with CO2 storage capabilities Features redesign of cementation mechanisms to utilize CO2 during fabrication

This program is specifically intended for adolescents suffering from posttraumatic stress disorder. Clients are exposed to safe but anxiety-provoking situations as a way of overcoming their trauma-related fears. Recounting the memory of the trauma also helps clients emotionally process their traumatic experiences in order to diminish PTSD symptoms. The workbook is designed for adolescent use and includes teen-friendly forms to reinforce the skills learned in therapy.

WHO's Global Tuberculosis Report provides a comprehensive and up-to-date assessment of the TB epidemic and of progress in care and prevention at global, regional and country levels. This is done in the context of recommended global TB strategies and associated targets, and broader development goals. For the period 2016-2035, these are WHO's End TB Strategy and the United Nations' (UN) Sustainable Development Goals (SDGs), which share a common aim: to end the global TB epidemic. The main data sources for the report are annual rounds of global TB data collection implemented by WHO's Global TB Program since 1995 and databases maintained by other WHO departments, UNAIDS and the World Bank. In WHO's 2017 round of global TB data collection, 201 countries and territories that account for over 99% of the world's population and TB cases reported data.

New Horizons in Wastewaters Management

Clustering Phenomena in Nuclei

Carbon Dioxide Sequestration in Cementitious Construction Materials

Health and Health Care in South Africa

Oncothermia: Principles and Practices

The Palgrave Handbook of Gender and Healthcare

Nanomaterials and Nanoarchitectures

At last, here is a baseline book for anyone who is confused by cryptic computer programs, algorithms and formulae, but wants to learn about applied bioinformatics. Now, anyone who can operate a PC, standard software and the internet can also learn to understand the biological basis of bioinformatics, of the existence as well as the source and availability of bioinformatics software, and how to apply these tools and interpret results with confidence. This process is aided by chapters that introduce important aspects of bioinformatics, detailed bioinformatics exercises (including solutions), and to cap it all, a glossary of definitions and terminology relating to bioinformatics.

Oncothermia is the next generation medical innovation that delivers selective, controlled and deep energy for cancer treatment. The basic principles for oncothermia stem from oncological hyperthermia, the oldest approach to treating cancer. Nevertheless, hyperthermia has been wrought with significant controversy, mostly stemming from shortcomings of controlled energy delivery. Oncothermia has been able to overcome these insufficiencies and prove to be a controlled, safe and efficacious treatment option. This book is the first attempt to elucidate the theory and practice of oncothermia, based on rigorous mathematical and biophysical analysis, not centered on the temperature increase. It is supported by numerous in-vitro and in-vivo findings and twenty years of clinical experience. This book will help scientists, researchers and medical practitioners in understanding the scientific and conceptual underpinnings of oncothermia and will add another valuable tool in the fight against cancer. Professor Andras Szasz is the inventor of oncothermia and the Head of St Istvan University's Biotechnology Department in Hungary. He has published over 300 papers and lectured at various universities around the world. Dr. Oliver Szasz is the managing director of Oncotherm, the global manufacturer and distributor of medical devices for cancer treatment used in Europe & Asia since the late 1980s. Dr. Nora Szasz is currently a management consultant in healthcare for McKinsey & Co.

High-performance liquid chromatography (HPLC) has emerged as the most powerful and versatile separation and analytical method. This book covers not only the conventional HPLC techniques but also the new developments, novel separation modes, column technology, as well as procedures and practices, particularly the advanced applications of HPLC in the fields of pharmaceutical, clinical, bioanalytical and food sciences.

Literary Studies in English

High-Performance Liquid Chromatography (HPLC)

Changing the DNA of Higher Education from the Inside Out

Proceedings of the 3rd International Balkan School on Nuclear Physics, Thessaloniki, Greece, September 18-24, 2002

World Congress on Medical Physics and Biomedical Engineering 2018

The Fellowship Details Its Program of Recovery for Anorexia and Bulimia

What Our Students Are Learning, What They're Not, and What We Can Do About It