Groundwater management is a formidable challenge, one that remains one of humanity’s foremost priorities. It has become a largely non-renewable resource that is overexploited in many parts of the world. In the 21st century, the issue moves from how to simply obtain the water we need to how we manage it sustainably for future generations, future economies, and future ecosystems. The focus then becomes one of understanding the drivers and current state of the groundwater resource, and restoring equilibrium to at-risk aquifers. Many interrelated dimensions, however, come to bear when trying to manage groundwater effectively. An integrated approach to groundwater necessarily involves many factors beyond the aquifer itself, such as surface water, water use, water quality, and ecohydrology. Moreover, the science by itself can only define the fundamental bounds of what is possible; effective IGM must also engage the wider community of stakeholders to develop and support policy and other socioeconomic tools needed to realize effective IGM.

In order to demonstrate IGM, this book covers theory and principles, embracing: 1) an overview of the dimensions and requirements of groundwater management from an international perspective; 2) the scale of groundwater issues internationally and its links with other sectors, principally energy and climate change; 3) groundwater governance with regard to principles, instruments, and institutions available for IGM; 4) biophysical constraints and the capacity and role of hydrogeological and hydrogeological science including water quality concerns; and 5) necessary tools including models, data infrastructures, decision support systems and the management of uncertainty. Examples of effective, and failed, IGM are given. Throughout, the importance of the socioeconomic context that connects all effective IGM is emphasized. Taken as a whole, this work relates the many facets of effective IGM, from the catchment to global perspective.
surgery is an important link for the development in clinical surgery, research and teaching. Experimental surgery was part of the most important surgical discoveries in the past century. Since 1901 nine Nobel Prizes have been awarded to the pioneers had remarkable achievements in the basic or practical surgery. In recent 20 years, experimental surgery has achieved new advances, like laparoscopic and robotic surgery, tissue engineering, and gene therapy which are widely applied in clinic surgery. The present book covers wide experimental surgery in preclinical research models subdivided in two volumes. Volume I introduces surgical basic notions, techniques, and different surgical models involved in basic experimental surgery and review the biomechanical models, ischemia/reperfusion injury models, repair and regeneration models, and organ and tissue transplantation models, respectively. Volume II introduces several specific experimental models such as laparoscopic and bariatric experimental surgical models. The second volume also introduces graft-versus-host disease, and other experimental models. Review the advances and development of recent techniques such as tissue engineering, organ preservation, wound healing and scarring, gene therapy and robotic surgery. The book documents the enormous volume of knowledge we have acquired in the field of experimental surgery. In this book, we have invited experts from the United States, Canada, France, Germany, China, Japan, Korea, UK, Sweden, Netherlands, Hungary and Turkey to contribute 36 chapters in the fields of their expertise. These two volumes are the compilation of basic experimental surgery and updated advances of new development in this field that will be invaluable to surgeons, residents, graduate students, surgical researchers, physicians, immunologists, veterinarians and nurses in surgery.

Loose Leaf for Case Studies in Finance Kenneth Eades 2017-12-13 Case Studies in Finance links managerial decisions to capital markets and the expectations of investors. At the core of almost all of the cases is a valuation task that requires students to look to financial markets for guidance in resolving the case problem. The focus on value helps managers understand the impact of the firm on the world around it. These cases also invite students to apply modern information technology to the analysis of managerial decisions. The cases may be taught in many different combinations. The eight-part sequence indicated by the table of contents relates to course designs used at the authors' schools. Each part of the casebook suggests a concept module, with a particular orientation.

Management of Legionella in Water Systems National Academies of Sciences, Engineering, and Medicine 2020-02-20 Legionnaires’ disease, a pneumonia caused by the Legionella bacterium, is the leading cause of reported waterborne disease outbreaks in the United States. Legionella occur naturally in water from many different environmental sources, but grow rapidly in the warm, stagnant conditions that can be found in engineered water systems such as cooling towers, building plumbing, and hot tubs. Humans are primarily exposed to Legionella through inhalation of contaminated aerosols into the respiratory system. Legionnaires’ disease can be fatal, with between 3 and 33 percent of Legionella infections leading to death, and studies show the incidence of Legionnaires’ disease in the United States increased five-fold from 2000 to 2017. Management of Legionella in Water Systems reviews the state of science on Legionella contamination of water systems, specifically the ecology and diagnosis. This report explores the process of transmission via water systems, quantification, prevention and control, and policy and training issues that affect the incidence of Legionnaires’ disease. It also analyzes existing knowledge gaps and recommends research priorities moving forward.

Management Information Systems Kenneth C. Laudon 2004 Management Information Systems provides comprehensive and integrative coverage of essential new technologies, information system applications, and their impact on business models and managerial decision-making in an exciting and interactive manner. The twelfth edition focuses on the major changes that have been made in information technology over the past two years, and includes new opening, closing, and Interactive Session cases.

Pocket Book of Hospital Care for Children World Health Organization 2013 The Pocket Book is for use by doctors nurses and other health workers who are responsible for the care of young children at the first level referral hospitals. This second edition is based on evidence from several WHO updated and published clinical guidelines. It is for use in both inpatient and outpatient care in small hospitals with basic laboratory facilities and essential medicines. In some settings these guidelines can be used in any facilities where sick children are admitted for inpatient care. The Pocket Book is one of a series of documents and tools that support the Integrated Management.

Going Universal Daniel Cotlear 2015-09-28 This book is about 24 developing countries that have embarked on the journey towards universal health coverage (UHC) following a bottom-up approach, with a special focus on the poor and vulnerable, through a systematic data collection that provides practical insights to policymakers and practitioners. Each of the UHC programs analyzed in this book is seeking to overcome the legacy of inequality by tackling both a “financing gap”? and a “provision gap”?: the financing gap (or lower per capita spending on the poor) by spending additional resources in a pro-poor way; the provision gap (or underperformance of service delivery for the poor) by expanding supply and changing incentives in a variety of ways. The prevailing view seems to indicate that UHC require not just more money, but also a focus on changing the rules of the game for spending health system resources. The book does not attempt to identify best practices, but rather aims to help policy makers understand the options they face, and help develop a new operational research agenda. The main chapters are focused on providing a granular understanding of policy design, while the appendixes offer a systematic review of the literature attempting to evaluate UHC program impact on access to services, on financial protection, and on health outcomes.

Caring for People who Sniff Petrol Or Other Volatile Substances National Health and Medical Research Council (Australia) 2011 These guidelines provide recommendations that outline the critical aspects of infection prevention and control. The recommendations were developed using the best available evidence and consensus methods by the Infection Control Steering Committee. They have been prioritised as key areas to prevent and control infection in a healthcare facility. It is recognised that the level of risk may differ according to the different types of facility and therefore some recommendations should be justified by risk assessment. When implementing these recommendations all healthcare facilities need to consider the risk of transmission of infection and implement according to their specific setting and circumstances.

Petroleum Abstracts 1993 Laboratory Techniques in Rabies World Health Organization 1973 U.S. Navy Cold Weather Handbook for Surface Ships 1988 Managing aquifer recharge UNESCO 2021-11-25 A Practical Guide for Medical Teachers John Dent 2017-04-26 The Fifth Edition of the highly praised Practical Guide for Medical Teachers provides a bridge between the theoretical aspects of medical education and the delivery of enthusiastic and effective teaching in basic science and clinical medicine. Healthcare professionals are committed teachers and this book is an essential guide to help them maximise their performance. This highly regarded book recognises the importance of educational skills in the delivery of quality teaching in medicine. The contents offer valuable insights into all important aspects of medical education today. A leading educationalist from the USA joins the book’s editorial team. The continual emergence of new topics is recognised in this new edition with nine new chapters: The role of patients as teachers and assessors; Medical humanities; Decision-making; Alternative medicine; Global awareness; Education at a time of ubiquitous information; Programmatic assessment; Student engagement; and Social accountability. An enlarged group of authors from more than 15 countries provides both an international perspective and a multi-professional approach to topics of interest to all healthcare teachers.

Cases in Pre-Hospital and Retrieval Medicine Dan Ellis 2009-12-01 This book focuses on the principles of PHC and Retrieval medicine and the continuum of care of the critically injured trauma patient in the field. It is case based and uses real pre-hospital and retrieval situations, presented in question format followed by an extensive discussion highlighting key areas of the specialty.
the questions and answers are each 3 4 pages in length and most are accompanied by a photo from author archives/real events. the questions have been divided into those with a predominantly pre-hospital theme and those based around retrieval medicine. a third section covers ser

Laboratory Animal Medicine James G. Fox 2013-10-02 Laboratory Animal Medicine is a compilation of papers that deals with the diseases and biology of major species of animals used in medical research. The book discusses animal medicine, experimental methods and techniques, design and management of animal facilities, and legislation on laboratory animals. Several papers discuss the biology and diseases of mice, hamsters, guinea pigs, and rabbits. Another paper addresses the dog and cat as laboratory animals, including sourcing of these animals, housing, feeding, and their nutritional needs, as well as breeding and colony management. The book also describes ungulates as laboratory animals, including topics on sourcing, husbandry, preventive medical treatments, and housing facilities. One paper addresses primates as test animals, covering the biology and diseases of old world primates, Cebidae, and ferrets. Some papers pertain to the treatment, diseases, and needed facilities for birds, amphibians, and fish. Other papers then deal with techniques of experimentation, anesthesia, euthanasia, and some factors (spontaneous diseases) that complicate animal research. The text can prove helpful for scientists, clinical assistants, and researchers whose work involves laboratory animals.

Collapse Jared Diamond 2013-03-21 From the author of Guns, Germs and Steel, Jared Diamond's Collapse: How Societies Choose to Fail or Survive is a visionary study of the mysterious downfall of past civilizations. Now in a revised edition with a new afterword, Jared Diamond's Collapse uncovers the secret behind why some societies flourish, while others founder - and what this means for our future. What happened to the people who made the forlorn long-abandoned statues of Easter Island? What happened to the architects of the crumbling Maya pyramids? Will we go the same way, our skyscrapers one day standing derelict and overgrown like the temples at Angkor Wat? Bringing together new evidence from a startling range of sources and piecing together the myriad influences, from climate to culture, that make societies self-destruct, Jared Diamond's Collapse also shows how - unlike our ancestors - we can benefit from our knowledge of the past and learn to be survivors. 'A grand sweep from a master storyteller of the human race' - Daily Mail 'Riveting, superb, terrifying' - Observer 'Gripping ... the book fulfills its huge ambition, and Diamond is the only man who could have written it' - Economis 'This book shines like all Diamond's work' - Sunday Times

Industrial & Mining Standard 1914 Nitrate Contamination Istvan Bogardi 2013-06-29 The nitrate content of drinking water is rising at an alarming rate in several regions of NATO countries and elsewhere in the world. The increase is due to lack of proper sewage treatment, and primarily to excess fertilizer application. Also, eutrophication in several coastal areas is triggered by high nitrate concentrations. The main purpose of this book is to integrate scientific knowledge related to exposure assessment, health consequences and control of nitrate contamination in water. The motivation is related to the magnitude, the possible adverse health effects, and the high cost of control ling nitrate contamination. Future research tasks are defined by an interaction among hydrologists, toxicologists and environmental engineers in an integrated framework for nitrate risk management. The target readership of this book is a mix of university colleagues, practitioners from both the private and public sectors and advanced graduate students working with the hydrological, health science or environmental engineering aspects of nitrate contamination. The main conclusions include: 1. For risk assessment purposes, knowledge and sufficiently accurate models are available to predict nitrate load and its fate in water under changes in land use. 2. Once agricultural exposure controls are implemented, the response times in ground water may be so long as to make controls unrealistic. 3. It is still unknown whether agricultural best management practice is a compromise between nitrate risk reduction and agricultural revenue. 4. The current drinking water guidelines of 10 mg/L N03N need not be changed.

Modern Control Design Ashish Tewari 2002-04-01 In this book, Tewari emphasizes the physical principles and engineering applications of modern control system design. Instead of detailing the mathematical theory, MATLAB examples are used throughout.

Management of Dyslipidemia Wilbert S. Aronson 2021-07-21 Dyslipidemia is a major risk factor for cardiovascular events, cardiovascular mortality, and all-cause mortality. The earlier in life dyslipidemia is treated, the better the prognosis. The current book is an excellent one on dyslipidemia written by experts on this topic. This book includes 12 chapters including 5 on lipids, 4 on hypercholesterolemia in children, and 3 on the treatment of dyslipidemia. This book should be read by all health care professionals taking care of patients, including pediatricians since atherosclerotic cardiovascular disease begins in childhood.

Lymphedema Byung-Boong Lee 2018-01-10 The second edition of this book serves as a central source of theoretical and practical knowledge to optimize the evaluation and treatment of patients with lymphedema. The book covers all aspects of the disease from anatomical and histological features to diagnosis as well as physical/medical and surgical management of the disease. Updated from the first edition to reflect the substantial progress in diagnostics, medical care and surgical intervention for this patient population, this volume has been reorganized to meet today's practice requirements. It addresses the challenges faced by clinicians in the management of chronic lymphedema enabling them to meet the medical needs of this large patient community. Edited by world leaders in Vascular Medicine and Surgery, this comprehensive volume provides clear, concise background and recommendations in an easy-to-use format. It is a valuable reference tool for clinical practitioners (physicians/nurse practitioners/technicians) who wish to deliver state-of-the-art health care to their patients with lymphatic and venous disorders.

Cost Accounting Mark Lee Inman 2014-05-21 Cost Accounting, Stage 2 discusses the basic elements of cost, cost collection, and cost accounting techniques and methods. The book provides an introduction to the concept of cost accounting and tackles cost ascertainment and conversion costs. The text discusses the various types of costing such as job, process, marginal, and standards. A whole chapter is also dedicated to budgets, variance analysis, and presentation of cost accounting information. The text will be of great reference material for both students and practitioners of accounting.

Global Trends 2030 Office of the Director of National Intelligence Council 2017-03-11 This publication covers global megatrends for the next 20 years and how they will affect the United States. This is the fifth installment in the National Intelligence Council's series aimed at providing a framework for thinking about possible futures and their implications. The report is intended to stimulate strategic thinking about the rapid and vast geopolitical changes characterizing the world today and possible global trajectories during the next 15-20 years by identifying critical trends and potential discontinuities. The authors distinguish between megatrends, those factors that will likely occur under any scenario, and game-changers, critical variables whose trajectories are far less certain. NIC 2012-001. Several innovations are included in Global Trends 2030, including: a review of the four previous Global Trends reports, input from academic and other experts around the world, coverage of disruptive technologies, and a chapter on the potential trajectories for the US role in the international system and the possible the impact on future international relations. Table of Contents: Introduction 1 Megatrends 6 Individual Empowerment 8 Poverty Reduction 8 An Expanding Global Middle Class 8 Education and the Gender Gap 10 Role of Communications Technologies 11 Improving Health 11 A MORE CONFLICTED IDEOLOGICAL LANDSCAPE 12 Diffusion of Power 15 THE RISE AND FALL OF COUNTRIES: NOT THE SAME OLD STORY 17 THE LIMITS OF HARD POWER IN THE WORLD OF 2030 18 Demographic Patterns 20 Widespread Aging 20 Shrinking Number of Youthful Countries 22 A New Age of Migration 23 The World as Urban 26 Growing Food, Water, and Energy Nexus 30 Food, Water, and Climate 30 A Brighter Energy Outlook 34 Game-Changers 38 The Crisis-Prone Global Economy 40 The Plight of the West 40 Crunch Time Too for the Emerging Powers 43 A Multipolar Global
Economy: Inherently More Fragile? 46 The Governance Gap 48 Governance Starts at Home: Risks and Opportunities 48 INCREASED FOCUS ON EQUALITY AND OPENNESS 53 NEW GOVERNMENTAL FORMS 54 A New Regional Order? 55 Global Multilateral Cooperation 55 The Potential for Increased Conflict 59 INTRASTATE CONFLICT: CONTINUED DECLINE 59 Interstate Conflict: Chances Rising 61 Wider Scope of Regional Instability 70 The Middle East: At a Tipping Point 70 South Asia: Shocks on the Horizon 75 East Asia: Multiple Strategic Futures 76 Europe: Transforming Itself 78 Sub-Saharan Africa: Turning a Corner by 2030? 79 Latin America: More Prosperous but Inherently Fragile 81 The Role of the United States 83 Information Technologies 83 AUTOMATION AND MANUFACTURING TECHNOLOGIES 87 Resource Technologies 90 Health Technologies 95 The Middle East: At a Tipping Point 70 South Asia: Shocks on the Horizon 75 East Asia: Multiple Strategic Futures 76 Europe: Transforming Itself 78 Sub-Saharan Africa: Turning a Corner by 2030? 79 Latin America: More Prosperous but Inherently Fragile 81 The Role of the United States 83 Information Technologies 83 AUTOMATION AND MANUFACTURING TECHNOLOGIES 87 Resource Technologies 90 Health Technologies 95

Regarding the Dead
Alexandra Fletcher 2014
A key publication on the British Museum's approach to the ethical issues surrounding the inclusion of human remains in museum collections and possible solutions to the dilemmas relating to their curation, storage, access management and display.

Oh's Intensive Care Manual E-Book
Andrew D. Bersten
For nearly 40 years, Oh's Intensive Care Manual has been the quick reference of choice for ICU physicians at all levels of experience. The revised 8th edition maintains this tradition of excellence, providing fast access to practical information needed every day in today's intensive care unit. This bestselling manual covers all aspects of intensive care in sufficient detail for daily practice while keeping you up to date with the latest innovations in the field. Short, to-the-point chapters distill the essential information you need to know for safe, effective care of patients in the ICU. Each topic includes theoretical knowledge, practical methods of treating the condition described, a review of the available evidence, and common pitfalls in treatment and management. Ideal for daily quick reference as well as an efficient review for professional examinations in critical care medicine.

Shahrooz Nafisi 2020-06-18
Semi-solid metal (SSM) processing, as a viable alternative manufacturing route to those of conventional casting and forging, has not yet been fully exploited despite nearly half a century since its introduction to the metal industry. The slow pace of adopting SSM routes may be due to various reasons, including capital costs, profit margins, and, most importantly, the lack of detailed analysis of various SSM processes in open literature to confidently establish their advantages over more conventional routes. Therefore, the SSM community must disseminate their findings more effectively to generate increased confidence in SSM processes in the eyes of our industrial leaders. As such, we have embarked on the task to invite the leaders in SSM research to share their findings in a Special Issue dedicated to semi-solid processing of metals and composites. SSM processing takes advantage of both forming and shaping characteristics usually employed for liquid and solid materials. In the absence of shear forces, the semi-solid metal has similar characteristics to solids, i.e., easily transferred and shaped; by applying a defined force, the viscosity is reduced and the material flows like a liquid. These unique dual characteristics have made SSM routes attractive alternatives to conventional casting on an industrial scale. With the intention of taking full advantage of SSM characteristics, it is crucial to understand SSM processing, including topics such as solidification and structural evolution, flow behavior through modelling and rheology, new processes and process control, alloy development, and properties in general. This Special Issue focuses on the recent research and findings in the field with the aim of filling the gap between industry and academia, and to shed light on some of the fundamentals of science and technology of semi-solid processing.

Semi-Solid Processing of Alloys and Composites