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KEY=PDF - JERAMIAH RODERICK

ELEMENTS OF ENVIRONMENTAL ENGINEERING

S. Chand Publishing The book is the outcome of Author's experience gained while dealing with the Manifold aspects of the topics covered both in the teaching as well as in the practical fields.

URBAN AIR POLLUTION IN ASIAN CITIES

STATUS, CHALLENGES AND MANAGEMENT

Routledge Air pollution has become part of the daily existence of many people who work, live and use the streets in Asian cities. Each day millions of city dwellers breathe air polluted with concentrations of chemicals, smoke and particles that dramatically exceed World Health Organization guideline values. Deteriorating air quality has resulted in significant impacts on human health and environment in Asia. This book provides a comprehensive and comparative assessment of the current status and challenges in urban air pollution management in 20 cities in the Asian region. It examines the effects on human health and the environment and future implications for planning, transport and energy sectors. National and local governments have begun to develop air quality management strategies to address the deterioration in urban air quality; however, the scope and effectiveness of such strategies vary widely. This book benchmarks these air quality management strategies, examines successes and failures in these cities and presents strategies for improving air quality management in cities across Asia and the rest of our rapidly urbanizing world. Information on air quality in Asia is clearly presented with easy-to-read city profiles, tables and graphs. This is an essential resource for all those concerned with urban air quality management, not just in Asia but in cities across our rapidly urbanizing world. Cities covered Bangkok, Beijing, Busan, Colombo, Dhaka, Hanoi, Ho Chi Minh City, Hong Kong, Jakarta, Kathmandu, Kolkata, Metro Manila, Mumbai, New Delhi, Seoul, Shanghai, Singapore, Surabaya, Taipei and Tokyo

WATER AND WASTEWATER ENGINEERING

Cambridge University Press This comprehensive textbook highlights the fundamental concepts and design principles related to water and wastewater engineering. Problems and issues arising from the lack of sustainable conventional treatment practices and potential methods for resolving problems are discussed in detail. The book starts with an introduction to water resources and the need for water and wastewater treatment, followed by evaluation of water demand in terms of quantity and quality. Mass transfer and transformation processes that are necessary for understanding the complexity of water pollution issues and treatment processes are discussed in detail. Pedagogical features include learning objectives, chapter-wise study outlines, detailed solutions to important problems and self-evaluation exercises with answers. Case studies for specific water treatment requirements are provided to enable the students to choose and apply only relevant treatment processes in their design.

EARTHQUAKE RESISTANT DESIGN OF STRUCTURES

OUP India Earthquake-resistant Design of Structures 2e is designed for undergraduate students of civil engineering.

BUILDING MATERIALS

Routledge This text on building materials includes discussion of structural clay products, rocks and stones, wood, materials for making concrete, ferrous and non-ferrous metals, and miscellaneous materials.

EXAMINING THE INTERSECTION OF CIRCULAR ECONOMY, FORESTRY, AND INTERNATIONAL TRADE

IGI Global Sustainable development has always been a contested concept and has been extensively debated over the last 30 years with new classifications arising since then. There was a previous push for the radical transformations of the market economy to downscale production and consumption that would increase human well-being and enhance ecological conditions. Because of this conflict, there was a need for a new model that challenges and could be the alternative for the liner economy; this new model is called the circular economy. A circular economy aimed at eliminating waste and the continual use of resources. It gained its ground in the era of disruptive technological advancement and a dynamic global value chain. By supporting resource-efficient industrial models, the circular economy preserves and improves natural capital, optimizes the value of resources, and abolishes negative environmental externalities such as pollution. Examining the Intersection of Circular Economy, Forestry, and International Trade explores the link between the circular economy and various aspects of the business and environment to understand the usage and viability of adapting the circular economy from a business perspective. The chapters highlight the transition to the circular economy, its implementation across society, its intersection with forestry and international trade, and the solutions and challenges of the circular economy. This book is aimed at researchers in the field of business management, economics, and environmental studies along with practitioners,

stakeholders, researchers, academicians, and students looking for more information on the various fields impacting the circular economy as well as the implementation, usage, and viability of a widespread adoption of a circular economy.

URBAN PEST MANAGEMENT

AN ENVIRONMENTAL PERSPECTIVE

CABI Urban pest management has recently faced dramatic change: advances in research and formulation technology now shape the products available and how they are applied. Bringing together ideas from both academic and private enterprises, this book covers methods of pest control, their impacts on human health and the environment, and strategies for integrated management that limit the use of harmful chemicals, providing a practical resource for researchers and policy makers in pest management, urban health, medical entomology and environmental science.

INTERNATIONAL ENVIRONMENT REPORTER

CURRENT REPORT

SUSTAINABLE SOLUTIONS FOR RAILWAYS AND TRANSPORTATION ENGINEERING

PROCEEDINGS OF THE 2ND GEOMEAST INTERNATIONAL CONGRESS AND EXHIBITION ON SUSTAINABLE CIVIL INFRASTRUCTURES, EGYPT 2018 - THE OFFICIAL INTERNATIONAL CONGRESS OF THE SOIL-STRUCTURE INTERACTION GROUP IN EGYPT (SSIGE)

Springer This volume brings together scientific experts in different areas that contribute to the railway track and transportation engineering challenges, evaluate the state-of-the-art, identify the shortcomings and opportunities for research and promote the interaction with the industry. In particular, scientific topics that are addressed in this volume include railway ballasted track degradation/settlement problems and stabilization/reinforcement technologies, switches and crossings and related derailments causes, train-induced vibrations and mitigation measures, operations, management and performance of ground transportation, and traffic congestion and safety procedures. The volume is based on the best contributions to the 2nd GeoMEast International Congress and Exhibition on Sustainable Civil Infrastructures, Egypt 2018 - The official international congress of the Soil-Structure Interaction Group in Egypt (SSIGE).

ENVIRONMENTAL ENGINEERING

McGraw-Hill Publishing Company

LUNAR SOURCEBOOK

A USER'S GUIDE TO THE MOON

CUP Archive The only work to date to collect data gathered during the American and Soviet missions in an accessible and complete reference of current scientific and technical information about the Moon.

ENTERPRISE BIG DATA ENGINEERING, ANALYTICS, AND MANAGEMENT

IGI Global The significance of big data can be observed in any decision-making process as it is often used for forecasting and predictive analytics. Additionally, big data can be used to build a holistic view of an enterprise through a collection and analysis of large data sets retrospectively. As the data deluge deepens, new methods for analyzing, comprehending, and making use of big data become necessary. Enterprise Big Data Engineering, Analytics, and Management presents novel methodologies and practical approaches to engineering, managing, and analyzing large-scale data sets with a focus on enterprise applications and implementation. Featuring essential big data concepts including data mining, artificial intelligence, and information extraction, this publication provides a platform for retargeting the current research available in the field. Data analysts, IT professionals, researchers, and graduate-level students will find the timely research presented in this publication essential to furthering their knowledge in the field.

SAFETY AND HEALTH FOR ENGINEERS

John Wiley & Sons SAFETY AND HEALTH FOR ENGINEERS A comprehensive resource for making products, facilities, processes, and operations safe for workers, users, and the public Ensuring the health and safety of individuals in the workplace is vital on an interpersonal level but is also crucial to limiting the liability of companies in the event of an onsite injury. The Bureau of Labor Statistics reported over 4,700 fatal work injuries in the United States in 2020, most frequently in transportation-related incidents. The same year, approximately 2.7 million workplace injuries and illnesses were reported by private industry employers. According to the National Safety Council, the cost in lost wages, productivity, medical and administrative costs is close to 1.2 trillion dollars in the US alone. It is imperative—by law and ethics—for engineers and safety and health professionals to drive down these statistics by creating a safe workplace and safe products, as well as maintaining a safe environment. Safety and Health for Engineers is considered the gold standard for engineers in all specialties, teaching an understanding of many components necessary to achieve safe workplaces, products, facilities, and methods to secure safety for workers, users, and the public. Each chapter offers information relevant to help safety professionals and engineers in the achievement of the first canon of professional ethics: to protect the health, safety, and welfare of the public. The textbook examines the fundamentals of safety, legal aspects, hazard recognition and control, the human element, and techniques to manage safety decisions. In doing so, it covers the primary safety essentials necessary for certification examinations for practitioners. Readers of the fourth edition of Safety and Health for Engineers readers will also find: Updates to all

chapters, informed by research and references gathered since the last publication The most up-to-date information on current policy, certifications, regulations, agency standards, and the impact of new technologies, such as wearable technology, automation in transportation, and artificial intelligence New international information, including U.S. and foreign standards agencies, professional societies, and other organizations worldwide Expanded sections with real-world applications, exercises, and 164 case studies An extensive list of references to help readers find more detail on chapter contents A solution manual available to qualified instructors Safety and Health for Engineers is an ideal textbook for courses in safety engineering around the world in undergraduate or graduate studies, or in professional development learning. It also is a useful reference for professionals in engineering, safety, health, and associated fields who are preparing for credentialing examinations in safety and health.

ENVIRONMENTAL ENGINEERING AND MANAGEMENT

PROCEEDING OF FIFTH INTERNATIONAL CONFERENCE ON MICROELECTRONICS, COMPUTING AND COMMUNICATION SYSTEMS

MCCS 2020

Springer Nature This book presents high-quality papers from the Fifth International Conference on Microelectronics, Computing & Communication Systems (MCCS 2020). It discusses the latest technological trends and advances in MEMS and nanoelectronics, wireless communication, optical communication, instrumentation, signal processing, image processing, bioengineering, green energy, hybrid vehicles, environmental science, weather forecasting, cloud computing, renewable energy, RFID, CMOS sensors, actuators, transducers, telemetry systems, embedded systems and sensor network applications. It includes papers based on original theoretical, practical and experimental simulations, development, applications, measurements and testing. The applications and solutions discussed here provide excellent reference material for future product development.

SUSTAINABLE ENVIRONMENT AND INFRASTRUCTURE

PROCEEDINGS OF EGRWSE 2019

Springer Nature This volume contains selects papers presented during the 2nd International Conference on Environmental Geotechnology, Recycled Waste Materials and Sustainable Engineering, held in the University of Illinois at Chicago. It covers the recent innovations, trends, and concerns, practical challenges encountered, and the solutions adopted in waste management and engineering, geotechnical and geoenvironmental engineering, infrastructure engineering, and sustainable engineering. This book will be useful for academics, educators, policy makers and professionals working in the field of civil engineering, chemical engineering, environmental sciences and public policy.

WASTE WATER ENGINEERING

Firewall Media

URBAN INSECT PESTS

SUSTAINABLE MANAGEMENT STRATEGIES

CABI A companion to 'Urban Pest Management', this book builds on the issues of insect pests in urban settings to discuss control strategies that look beyond products. From an environmental and health perspective, it is not always practical to spray chemicals indoors or in urban settings, so this work discusses sustainable control and best practice methods for managing insects that are vectors of disease, nuisance pests and the cause of structural damage.

THE DNA OF STRATEGY EXECUTION

NEXT GENERATION PROJECT MANAGEMENT AND PMO

John Wiley & Sons THE DNA OF STRATEGY EXECUTION "In a world where there are more questions than answers every leader will need to learn to dance to a different beat. In this insightful book, Jack Duggal has cracked the DNA of Strategy Execution. Ignore these insights at your own peril." — Dr. Tony O'Driscoll Global Head, DukeCE Labs, Duke Corporate Education Fuqua School of Business, Duke University DECODE THE DNA OF MANAGEMENT AND STRATEGY EXECUTION IN AN INCREASINGLY TURBULENT WORLD Just as DNA contains the genetic instructions used in the development and functioning of all living organisms, what if we could decode the elements of management and strategy execution? This insightful book offers new perspectives on age-old management challenges and illuminates better ways to organize and manage in an increasingly DANCE-world (Dynamic. Ambiguous. Non-Linear. Complex. Emergent). It puts the management DNA under the microscope, and shows how to develop, build and transform organizational project management and PMO capabilities essential for effective strategy execution. It provides a framework to measure what matters with a step-by-step approach to define and measure success and business value. The DNA of Strategy Execution: Next Generation Project Management and PMO provides innovative insights for organizational project management and PMO. Based on application and learnings from many organizations around the world, this book reveals a playbook for strategy execution that will help you: Decode the core elements of management and strategy execution DNA Design and build next-generation Project/Program Management and PMO platform essential for effective strategy execution Prepare your organization to effectively lead and implement agile transformation and organizational change Improve organizational project management (OPM) and PMO maturity Improve overall organizational effectiveness and innovation capabilities Whether you are a part of a startup, or an established incumbent organization, the impact of digitization and disruption requires a rethink and reset of how we organize and manage. This book presents a playbook for effective strategy execution with next-generation Project, Program and PMO capabilities.

PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON DATA ENGINEERING AND COMMUNICATION TECHNOLOGY

ICDECT 2016, VOLUME 1

Springer This two-volume book contains research work presented at the First International Conference on Data Engineering and Communication Technology (ICDECT) held during March 10–11, 2016 at Lavasa, Pune, Maharashtra, India. The book discusses recent research technologies and applications in the field of Computer Science, Electrical and Electronics Engineering. The aim of the Proceedings is to provide cutting-edge developments taking place in the field data engineering and communication technologies which will assist the researchers and practitioners from both academia as well as industry to advance their field of study.

WASTE MATERIALS IN ADVANCED SUSTAINABLE CONCRETE

REUSE, RECOVERY AND RECYCLE

Springer Nature

MOORING SYSTEM ENGINEERING FOR OFFSHORE STRUCTURES

Gulf Professional Publishing The mooring system is a vital component of various floating facilities in the oil, gas, and renewables industries. However, there is a lack of comprehensive technical books dedicated to the subject. *Mooring System Engineering for Offshore Structures* is the first book delivering in-depth knowledge on all aspects of mooring systems, from design and analysis to installation, operation, maintenance and integrity management. The book gives beginners a solid look at the fundamentals involved during mooring designs with coverage on current standards and codes, mooring analysis and theories behind the analysis techniques. Advanced engineers can stay up-to-date through operation, integrity management, and practical examples provided. This book is recommended for students majoring in naval architecture, marine or ocean engineering, and allied disciplines in civil or mechanical engineering. Engineers and researchers in the offshore industry will benefit from the knowledge presented to understand the various types of mooring systems, their design, analysis, and operations. Understand the various types of mooring systems and the theories behind mooring analysis Gain practical experience and lessons learned from worldwide case studies Combine engineering fundamentals with practical applications to solve today's offshore challenges

BASIC ENVIRONMENTAL ENGINEERING [ELECTRONIC RESOURCE]

About the Book: This textbook provides the basic information about the Environmental Engineering and as such, very much useful for the first year B. Tech. students of all branches/disciplines. The book covers the new syllabus of the semester scheme for the first year in R.T.U. and other universities. It encompasses the practical applications of the subject, that is the real need of the hour and also discusses the major environmental problems we face today. Key features Contains authentic information provided by the different Manuals prepared by The C.P.H.E.E.O. Includes examples of diffe.

IRRIGATION AND WATER RESOURCES ENGINEERING

New Age International The Book *Irrigation And Water Resources Engineering Deals With The Fundamental And General Aspects Of Irrigation And Water Resources Engineering And Includes Recent Developments In Hydraulic Engineering Related To Irrigation And Water Resources Engineering. Significant Inclusions In The Book Are A Chapter On Management (Including Operation, Maintenance, And Evaluation) Of Canal Irrigation In India, Detailed Environmental Aspects For Water Resource Projects, A Note On Interlinking Of Rivers In India, And Design Problems Of Hydraulic Structures Such As Guide Bunds, Settling Basins Etc.* The First Chapter Of The Book Introduces Irrigation And Deals With The Need, Development And Environmental Aspects Of Irrigation In India. The Second Chapter On Hydrology Deals With Different Aspects Of Surface Water Resource. Soil-Water Relationships Have Been Dealt With In Chapter 3. Aspects Related To Ground Water Resource Have Been Discussed In Chapter 4. Canal Irrigation And Its Management Aspects Form The Subject Matter Of Chapters 5 And 6. Behaviour Of Alluvial Channels And Design Of Stable Channels Have Been Included In Chapters 7 And 8, Respectively. Concepts Of Surface And Subsurface Flows, As Applicable To Hydraulic Structures, Have Been Introduced In Chapter 9. Different Types Of Canal Structures Have Been Discussed In Chapters 10, 11, And 13. Chapter 12 Has Been Devoted To Rivers And River Training Methods. After Introducing Planning Aspects Of Water Resource Projects In Chapter 14, Embankment Dams, Gravity Dams And Spillways Have Been Dealt With, Respectively, In Chapters 15, 16 And 17. The Students Would Find Solved Examples (Including Design Problems) In The Text, And Unsolved Exercises And The List Of References Given At The End Of Each Chapter Useful.

ONSITE WASTEWATER TREATMENT SYSTEMS MANUAL

"This manual contains overview information on treatment technologies, installation practices, and past performance."--Intro.

ENGINEERING SURVEYING

CRC Press Engineering surveying involves determining the position of natural and man-made features on or beneath the Earth's surface and utilizing these features in the planning, design and construction of works. It is a critical part of any engineering project. Without an accurate understanding of the size, shape and nature of the site the project risks expensive and time-consuming errors or even catastrophic failure. This fully updated sixth edition of *Engineering Surveying* covers all the basic principles and practice of the fundamentals such as vertical control, distance, angles and position right through to the most modern technologies. It includes: * An introduction to geodesy to facilitate greater understanding of satellite systems * A fully updated chapter on GPS, GLONASS and GALILEO for satellite positioning in surveying * All new chapter on the important subject of rigorous estimation of control coordinates *

Detailed material on mass data methods of photogrammetry and laser scanning and the role of inertial technology in them With many worked examples and illustrations of tools and techniques, it suits students and professionals alike involved in surveying, civil, structural and mining engineering, and related areas such as geography and mapping.

URBAN MINING FOR WASTE MANAGEMENT AND RESOURCE RECOVERY

SUSTAINABLE APPROACHES

CRC Press Scientific management strategies can help in exploring anthropogenic wastes (human-made materials) as potential resources through the urban mining concept and be a panacea for sustainable development. This book covers five broader aspects of waste management and resource recovery in urban mining including solid and liquid waste management and treatment. It explains sustainable approaches of urban mining for the effective management of solid and liquid wastes and facilitates their conversion into secondary resources. Overall, this book provides details of urban mining and its different applications including current waste management problems, practices, and challenges faced worldwide. Presents a holistic approach for urban mining considering various types of wastes Describes contemporary integrated approaches for waste management with specific case studies Provides technical, social, and environmental aspects of solid and liquid wastes Considers aspects of sustainability and a circular bio-economy Incorporates pertinent case studies on water and wastewater management This volume caters to researchers and graduate students in environmental engineering, solid waste management, wastewater treatment, and materials science.

STANDARD HANDBOOK OF ENVIRONMENTAL ENGINEERING

McGraw-Hill Professional Publishing Now revised and updated, the second edition of this book includes new topics including a look at pollution prevention, drinking water standards, volatile organic compounds, indoor air quality and emissions monitoring.

BASIC CIVIL ENGINEERING

Firewall Media

ELEMENTS OF ENVIRONMENTAL ENGINEERING

THERMODYNAMICS AND KINETICS, SECOND EDITION

CRC Press Completely revised and updated, *Elements of Environmental Engineering: Thermodynamics and Kinetics, Second Edition* covers the applications of chemical thermodynamics and kinetics in environmental processes. Each chapter has been rewritten and includes new examples that better illuminate the theories discussed. An excellent introduction to environmental engineering, this reference stands alone in its multimedia approach to fate and transport modeling and in pollution control design options. Clearly and lucidly written, it provides extensive tables, figures, and data that make it the reference to have on this subject.

DESIGN MANUAL

ONSITE WASTEWATER TREATMENT AND DISPOSAL SYSTEMS

HANDBOOK OF RESEARCH ON STRATEGIC SUPPLY CHAIN MANAGEMENT IN THE RETAIL INDUSTRY

IGI Global Customer satisfaction is a pivotal component to any business that provides goods or services to the public. By effectively managing the flow of products, business can adapt to the growing demands of consumers and deliver successful customer service. The *Handbook of Research on Strategic Supply Chain Management in the Retail Industry* is an authoritative reference source for the latest scholarly research on properly managing business processes in order to satisfy end-user requirements and increase competitive advantage in the retail marketplace. Highlighting concepts relating to field applications, customer relationships, and current trends in logistics management, this book is ideally designed for business professionals, managers, upper-level students, and researchers interested in innovative strategies and best practices in modern supply chains.

START WITH WHY

HOW GREAT LEADERS INSPIRE EVERYONE TO TAKE ACTION

Penguin The inspirational bestseller that ignited a movement and asked us to find our WHY Discover the book that is captivating millions on TikTok and that served as the basis for one of the most popular TED Talks of all time—with more than 56 million views and counting. Over a decade ago, Simon Sinek started a movement that inspired millions to demand purpose at work, to ask what was the WHY of their organization. Since then, millions have been touched by the power of his ideas, and these ideas remain as relevant and timely as ever. *START WITH WHY* asks (and answers) the questions: why are some people and organizations more innovative, more influential, and more profitable than others? Why do some command greater loyalty from customers and employees alike? Even among the successful, why are so few able to repeat their success over and over? People like Martin Luther King Jr., Steve Jobs, and the Wright Brothers had little in common, but they all started with WHY. They realized that people won't truly buy into a product, service, movement, or idea until they understand the WHY behind it. *START WITH WHY* shows that the leaders who have had the greatest influence in the world all think, act and communicate the same way—and it's the opposite of what everyone else does. Sinek calls this powerful idea *The Golden Circle*, and it provides a framework upon which organizations can be built, movements can be led, and people can be inspired. And it all starts with WHY.

INTRODUCTION TO PERMANENT PLUG AND ABANDONMENT OF WELLS

Springer Nature This open access book offers a timely guide to challenges and current practices to permanently plug and abandon

hydrocarbon wells. With a focus on offshore North Sea, it analyzes the process of plug and abandonment of hydrocarbon wells through the establishment of permanent well barriers. It provides the reader with extensive knowledge on the type of barriers, their functioning and verification. It then discusses plug and abandonment methodologies, analyzing different types of permanent plugging materials. Last, it describes some tests for verifying the integrity and functionality of installed permanent barriers. The book offers a comprehensive reference guide to well plugging and abandonment (P & A) and well integrity testing. The book also presents new technologies that have been proposed to be used in plugging and abandoning of wells, which might be game-changing technologies, but they are still in laboratory or testing level. Given its scope, it addresses students and researchers in both academia and industry. It also provides information for engineers who work in petroleum industry and should be familiarized with P & A of hydrocarbon wells to reduce the time of P & A by considering it during well planning and construction.

IMPROVING CONCRETE QUALITY

CRC Press *Improve the Quality of Concrete, Improve the Quality of Construction* Quality measurement is not prevalent in the concrete industry and quality investment is not seen as potentially generating a positive return. *Improving Concrete Quality* examines how and why concrete quality should be measured, and includes instruction on developing specifications with the aim of improving concrete quality. *Reduce Concrete Variability: Reduce Costs and Increase Volume* The first part of the book considers the tangible and intangible benefits of improved quality. The later chapters explore concrete strength variability in detail. It provides a greater grasp of the variation in concrete, as well as a deeper understanding of how material variability affects concrete performance. The author discusses the components of variability (material, manufacturing, testing) and provides steps to measuring and reducing variability to improve the quality of concrete. The text also contains a chapter on data analysis for quality monitoring and test results. *Come Away with Practices and Tools That Can Be Applied Immediately: Provides techniques and how specifications can improve concrete quality* Offers a clear understanding of the link between the materials (cement, SCM, aggregate, water, air), manufacturing, testing variability, and concrete quality Includes information on analyzing test data to improve quality *Improving Concrete Quality* quantifies the benefits of improved quality, and introduces novel ways of measuring concrete quality. This text is an ideal resource for quality personnel in the concrete industry. It also benefits architects, engineers, contractors, and researchers.

HANDBOOK OF RESEARCH ON HUMAN-COMPUTER INTERFACES, DEVELOPMENTS, AND APPLICATIONS

IGI *Global Human Computer Interaction (HCI)* is easy to define yet difficult to predict. Encompassing the management, study, planning, and design of the ways in which users interact with computers, this field has evolved from using punch cards to force touch in a matter of decades. What was once considered science fiction is now ubiquitous. The future of HCI is mercurial, yet predictions point to the effortless use of high-functioning services. *The Handbook of Research on Human-Computer Interfaces, Developments, and Applications* is primarily concerned with emerging research regarding gesture interaction, augmented reality, and assistive technologies and their place within HCI. From gaming to rehabilitation systems, these new technologies share the need to interface with humans, and as computers become thoroughly integrated into everyday life, so does the necessity of HCI research. This handbook of research benefits the research needs of programmers, developers, students and educators in computer science, and researchers.

SOLAR LIGHTING

Springer Science & Business Media Limited availability of grid-based electricity is a major challenge faced by many developing countries, particularly the rural population. Fuel-based lighting, such as the kerosene lantern, is widespread in these areas, but it is a poor alternative, contributing to global warming and causing serious health problems. Several developing countries are therefore now encouraging the use of sustainable lighting. *Solar Lighting* gives an in-depth analysis of energy-efficient light production through the use of solar-powered LED systems. The authors pay particular attention to the interplay between energy transformation and device efficiency. They also discuss diverse aspects of renewable energy, including how an improvement in the efficiency of appliances can reduce the cost of energy. *Solar Lighting* is written for physicists, environmental experts and lighting engineers. It is also suitable for undergraduate students in the fields of environmental science, electrical engineering and renewable energy.

MATERIALS AND SUSTAINABLE DEVELOPMENT

Butterworth-Heinemann This book, from noted materials selection authority Mike Ashby, provides a structure and framework for analyzing sustainable development and the role of materials in it. The aim is to introduce ways of exploring sustainable development to readers in a way that avoids simplistic interpretations and approaches complexity in a systematic way. There is no completely "right" answer to questions of sustainable development – instead, there is a thoughtful, well-researched response that recognizes concerns of stakeholders, the conflicting priorities and the economic, legal and social aspects of a technology as well as its environmental legacy. The intent is not to offer solutions to sustainability challenges but rather to improve the quality of discussion and enable informed, balanced debate. Winner of a 2016 Most Promising New Textbook Award from the Textbook and Academic Authors Association Describes sustainable development in increasingly detailed progression, from a broad overview to specific tools and methods Six chapter length case studies on such topics as biopolymers, electric cars, bamboo, and lighting vividly illustrate the sustainable development process from a materials perspective Business and economic aspects are covered in chapters on corporate sustainability and the "circular materials economy" Support for course use includes online solutions manual and image bank

DATA ANALYSIS FOR OMIC SCIENCES: METHODS AND APPLICATIONS

Elsevier *Data Analysis for Omic Sciences: Methods and Applications, Volume 82*, shows how these types of challenging datasets can be analyzed. Examples of applications in real environmental, clinical and food analysis cases help readers disseminate these approaches. Chapters of note include an Introduction to Data Analysis Relevance in the Omics Era, Omics Experimental Design and Data Acquisition, Microarrays Data, Analysis of High-Throughput RNA Sequencing Data, Analysis of High-Throughput DNA Bisulfite

Sequencing Data, Data Quality Assessment in Untargeted LC-MS Metabolomic, Data Normalization and Scaling, Metabolomics Data Preprocessing, and more. Presents the best reference book for omics data analysis Provides a review of the latest trends in transcriptomics and metabolomics data analysis tools Includes examples of applications in research fields, such as environmental, biomedical and food analysis

COMMUNITY & PUBLIC HEALTH NURSING: PROMOTING THE PUBLIC'S HEALTH

Lippincott Williams & Wilkins Community & Public Health Nursing is designed to provide students a basic grounding in public health nursing principles while emphasizing aggregate-level nursing. While weaving in meaningful examples from practice throughout the text, the authors coach students on how to navigate between conceptualizing about a population-focus while also continuing to advocate and care for individuals, families, and aggregates. This student-friendly, highly illustrated text engages students, and by doing so, eases students into readily applying public health principles along with evidence-based practice, nursing science, and skills that promote health, prevent disease, as well as protect at-risk populations! What the 8th edition of this text does best is assist students in broadening the base of their knowledge and skills that they can employ in both the community and acute care settings, while the newly enhanced ancillary resources offers interactive tools that allow students of all learning styles to master public health nursing.