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HYDROPOWER ENGINEERING HANDBOOK

McGraw-Hill Companies

THE ELECTRIC POWER ENGINEERING HANDBOOK - FIVE VOLUME SET

CRC Press The Electric Power Engineering Handbook, Third Edition updates coverage of recent developments and rapid technological growth in crucial aspects of power systems, including protection, dynamics and stability, operation, and control. With contributions from worldwide field leaders—edited by L.L. Grigsby, one of the world's most respected, accomplished authorities in power engineering—this reference includes chapters on: Nonconventional Power Generation Conventional Power Generation Transmission Systems Distribution Systems Electric Power Utilization Power Quality Power System Analysis and Simulation Power System Transients Power System Planning (Reliability) Power Electronics Power System Protection Power System Dynamics and Stability Power System Operation and Control Content includes a simplified overview of advances in international standards, practices, and technologies, such as small-signal stability and power system oscillations, power system stability controls, and dynamic modeling of power systems. Each book in this popular series supplies a high level of detail and, more importantly, a tutorial style of writing and use of photographs and graphics to help the reader understand the material. This resource will help readers achieve safe, economical, high-quality power delivery in a dynamic and demanding environment. Volumes in the set: K12642 Electric Power Generation, Transmission, and Distribution, Third Edition (ISBN: 9781439856284) K12648 Power Systems, Third Edition (ISBN: 9781439856338) K13917 Power System Stability and Control, Third Edition (9781439883204) K12650 Electric Power Substations Engineering, Third Edition (9781439856383) K12643 Electric Power Transformer Engineering, Third Edition (9781439856291)

HYDROPOWER

Academic Press Hydropower provides a complete discussion of the most up-to-date considerations of this method of creating renewable energy. After introducing the method's history, the author explores various considerations for engineers, planners and managers who need to determine the best placement and size of a plant. The book then presents various types of hydropower systems, such as Run-of-River Schemes and various types of Dam and Turbines, also considering the important economic, environmental and geological impacts of each. Those involved in the planning, design and management of hydropower systems, such as engineers, researchers, managers and policymakers will find this book a very valuable and insightful resource. Explores different types of dams and turbines set alongside easy-to-understand diagrams, such as Embankment Dams, Concrete Arch Dams, Reaction Turbines and Francis Turbines Considers various economic and environmental factors significant for this type of project, such as resettlement, biodiversity and greenhouse gases Discusses best practices for locating a hydropower site and how to make important decisions regarding placement and method

NATIONAL ENGINEERING HANDBOOK

HYDROLOGY

INTRODUCTION TO HYDRO ENERGY SYSTEMS

BASICS, TECHNOLOGY AND OPERATION

Springer Science & Business Media The authors have tried to strike a balance between a short book chapter and a very detailed book for subject experts. There are three prime reasons behind for doing so: first, the field is quite interdisciplinary and requires simplified presentation for a person from non-parent discipline. The second reason for this short-version of a full book is that both the authors have seen students and technically oriented people, who were searching for this type of book on hydro energy. The third reason and motivation was considering engineers who are starting their career in hydro energy sector. This book is targeted to present a good starting background and basic understanding for such professionals.

RENEWABLE ENERGY SYSTEMS

THE EARTHSCAN EXPERT GUIDE TO RENEWABLE ENERGY TECHNOLOGIES FOR HOME AND BUSINESS

Routledge This book is the long awaited guide for anyone interested in renewables at home or work. It sweeps away scores of common misconceptions while clearly illustrating the best in renewable and energy efficiency technologies. A fully illustrated guide to renewable energy for the home and small business, the book provides an expert overview of precisely which sustainable energy technologies are appropriate for wide-spread domestic and small business application. The sections on different renewable energy options provide detailed descriptions of each technology along with case studies, installation diagrams and colour photographs, showing precisely what is possible for the average household. The chapter on how to select the renewable technology most appropriate for ordinary homes and businesses summarizes this analysis in a neat and easy to use table and demonstrates with examples exactly how to assess your local renewable resources. Renewable technologies covered include wood energy, wind power, solar photovoltaics, solar thermal, passive solar, geothermal and air-to-air heat pumps as well as water or hydro based energy systems - plus the all-important subject of energy efficiency. Whilst written to be accessible to a wide audience, the book is targeted at readers who are keen to work with renewable technologies, students, building engineers, architects, planners, householders and home-owners.

LOW-HEAD POWER PLANTS

HYDROPOWER ENGINEERING

Prentice Hall

RESERVOIR SEDIMENTATION HANDBOOK

DESIGN AND MANAGEMENT OF DAMS, RESERVOIRS, AND WATERSHEDS FOR SUSTAINABLE USE

McGraw Hill Professional Proven strategies for controlling reservoir sediment All the state-of-the-art tools you need to extend water reservoir life by controlling sediment are packed into this hands-on resource. It helps you plan, design and manage both existing and proposed reservoirs and their associates watersheds. You'll learn to manage sediment for sustainable development. . .analyze suspended and deposited sediment. . .and estimate and measure erosion rates. Packed with clear illustrations and how-to examples, the book give you the know-how to: master sediment transport processes in reservoirs apply mathematical and physical models to analyze sediment processes route inflowing sediment through or around reservoir storage pools use turbid density currents to control sedimentation empty and scour sediments from a reservoir by means of hydraulic flushing and much more

HYDROELECTRIC ENERGY

RENEWABLE ENERGY AND THE ENVIRONMENT

CRC Press Providing essential theory and useful practical techniques for implementing hydroelectric projects, this book outlines the resources, power generation technologies, applications, and strengths and weaknesses for hydroelectric technologies. Emphasizing the links between energy and the environment, it serves as a useful background resource and facilitates decision-making regarding which renewable energy technology works best for different types of applications and regions. Including examples, real-world case studies, and lessons learned, each chapter contains exercise questions, references, and ample photographs and technical drawings from actual micro hydropower plants.

HANDBOOK OF NEURAL COMPUTATION

Academic Press Handbook of Neural Computation explores neural computation applications, ranging from conventional fields of mechanical and civil engineering, to electronics, electrical engineering and computer science. This book covers the numerous applications of artificial and deep neural networks and their uses in learning machines, including image and speech recognition, natural language processing and risk analysis. Edited by renowned authorities in this field, this work is comprised of articles from reputable industry and academic scholars and experts from around the world. Each contributor presents a specific research issue with its recent and future trends. As the demand rises in the engineering and medical industries for neural networks and other machine learning methods to solve different types of operations, such as data prediction, classification of images, analysis of big data, and intelligent decision-making, this book provides readers with the latest, cutting-edge research in one comprehensive text. Features high-quality research articles on multivariate adaptive regression splines, the minimax probability machine, and more Discusses machine learning techniques, including classification, clustering, regression, web mining, information retrieval and natural language processing Covers supervised, unsupervised, reinforced, ensemble, and nature-inspired learning methods

DESIGN OF HYDROELECTRIC POWER PLANTS - STEP BY STEP

CRC Press The design of a hydroelectric plant, along with an installation of transformation of potential energy of water into electricity, is an activity that is not standardized. Each new project is an interesting engineering challenge, and teams need to work in different conditions of each site, integrated to design a functional, economical and environmentally sustainable project. The development of a project, here understood as the plant itself, the reservoir, the maneuver substation and the associated transmission line, is a multidisciplinary activity that encompasses areas of civil engineering, geology,

mechanical and electrical engineering, environmental engineering, economic engineering, construction and assembly, and the engineering of operation and maintenance of civil works and electromechanical equipment. The book is organized to facilitate the performance of professional life of the new generations of engineers who will join the Electric Sector, or in other sectors that demand the knowledge regarding hydraulic structures. The book is a simple manual providing the practical step-by-step procedure for designing hydroelectric plants, including legislation, with a general view of the project.

THE CIVIL ENGINEERING HANDBOOK

CRC Press First published in 1995, the award-winning *Civil Engineering Handbook* soon became known as the field's definitive reference. To retain its standing as a complete, authoritative resource, the editors have incorporated into this edition the many changes in techniques, tools, and materials that over the last seven years have found their way into civil engineering research and practice. The *Civil Engineering Handbook, Second Edition* is more comprehensive than ever. You'll find new, updated, and expanded coverage in every section. In fact, more than 1/3 of the handbook is new or substantially revised. In particular you'll find increased focus on computing reflecting the rapid advances in computer technology that has revolutionized many aspects of civil engineering. You'll use it as a survey of the field, you'll use it to explore a particular subject, but most of all you'll use *The Civil Engineering Handbook* to answer the problems, questions, and conundrums you encounter in practice.

GUIDELINES FOR DESIGN OF INTAKES FOR HYDROELECTRIC PLANTS

American Society of Civil Engineers

HANDBOOK ON BATTERY ENERGY STORAGE SYSTEM

Asian Development Bank This handbook serves as a guide to deploying battery energy storage technologies, specifically for distributed energy resources and flexibility resources. Battery energy storage technology is the most promising, rapidly developed technology as it provides higher efficiency and ease of control. With energy transition through decarbonization and decentralization, energy storage plays a significant role to enhance grid efficiency by alleviating volatility from demand and supply. Energy storage also contributes to the grid integration of renewable energy and promotion of microgrid.

HANDBOOK OF ENERGY

DIAGRAMS, CHARTS, AND TABLES

Newnes *Handbook of Energy, Volume I: Diagrams, Charts, and Tables* provides comprehensive, organized coverage on all phases of energy and its role in society, including its social, economic, political, historical, and environmental aspects. While there is a wealth of information about energy available, it is spread across many books, journals, and websites and it tends to target either a particular form of energy or a specific audience. *Handbook of Energy* provides a central repository of information that meets diverse user communities. It focuses on visual, graphic, and tabular information in a schematic format. Individuals and researchers at all educational levels will find the *Handbook of Energy* to be a valuable addition to their personal libraries. Easy-to-read technical diagrams and tables display a vast array of data and concepts

TRANSITION TO RENEWABLE ENERGY SYSTEMS

John Wiley & Sons In this ready reference, top academic researchers, industry players and government officers join forces to develop commercial concepts for the transition from current nuclear or fossil fuel-based energy to renewable energy systems within a limited time span. They take into account the latest science and technology, including an analysis of the feasibility and impact on the environment, economy and society. In so doing, they discuss such complex topics as electrical and gas grids, fossil power plants and energy storage technologies. The contributions also include robust, conceivable and breakthrough technologies that will be viable and implementable by 2020.

HANDBOOK OF PHOTOVOLTAIC SCIENCE AND ENGINEERING

John Wiley & Sons The most comprehensive, authoritative and widely cited reference on photovoltaic solar energy Fully revised and updated, the *Handbook of Photovoltaic Science and Engineering, Second Edition* incorporates the substantial technological advances and research developments in photovoltaics since its previous release. All topics relating to the photovoltaic (PV) industry are discussed with contributions by distinguished international experts in the field. Significant new coverage includes: three completely new chapters and six chapters with new authors device structures, processing, and manufacturing options for the three major thin film PV technologies high performance approaches for multijunction, concentrator, and space applications new types of organic polymer and dye-sensitized solar cells economic analysis of various policy options to stimulate PV growth including effect of public and private investment Detailed treatment covers: scientific basis of the photovoltaic effect and solar cell operation the production of solar silicon and of silicon-based solar cells and modules how choice of semiconductor materials and their production influence costs and performance making measurements on solar cells and modules and how to relate results under standardised test conditions to real outdoor performance photovoltaic system installation and operation of components such as inverters and batteries, architectural applications of building-integrated PV Each chapter is structured to be partially accessible to beginners while providing detailed information of the physics and technology for experts. Encompassing a review of past work and the fundamentals in solar electric science, this is a leading reference and invaluable resource for all practitioners, consultants, researchers and students in the PV industry.

RENEWABLE ENERGY FOCUS HANDBOOK

Academic Press A one-stop desk reference, for engineers involved in renewable energies, this book will not gather dust on the shelf. It brings together the essential professional reference content from leading international contributors in the field. The full range of renewable energies are explored, including solar, wind, geothermal and bioenergy. * A hard-working desk reference, providing all the essential material needed by energy and environmental engineers on a day-to-day basis * Fundamentals, key techniques, engineering best practice and rules-of-thumb together in one quick-reference sourcebook * Definitive content by the leading authors in the field, including Bent Sorensen, Paul Breeze, Galen Suppes and Truman Storvick

WATER-RESOURCES ENGINEERING

FLOOD HANDBOOK

PRINCIPLES AND APPLICATIONS

CRC Press Floods are difficult to prevent but can be managed in order to reduce their environmental, social, cultural, and economic impacts. Flooding poses a serious threat to life and property, and therefore it's very important that flood risks be taken into account during any planning process. This handbook presents different aspects of flooding in the context of a changing climate and across various geographical locations. Written by experts from around the world, it examines flooding in various climates and landscapes, taking into account environmental, ecological, hydrological, and geomorphic factors, and considers urban, agriculture, rangeland, forest, coastal, and desert areas. Features Presents the main principles and applications of the science of floods, including engineering and technology, natural science, as well as sociological implications. Examines flooding in various climates and diverse landscapes, taking into account environmental, ecological, hydrological, and geomorphic factors. Considers floods in urban, agriculture, rangeland, forest, coastal, and desert areas Covers flood control structures as well as preparedness and response methods. Written in a global context, by contributors from around the world.

FIELD GUIDE TO APPROPRIATE TECHNOLOGY

Elsevier *Field Guide to Appropriate Technology* is an all-in-one "hands-on guide" for nontechnical and technical people working in less developed communities. It has been developed and designed with a prestigious team of authors, each of whom has worked extensively in developing societies throughout the world. This field guide includes: Step-by-step instructions and illustrations showing how to build and maintain a vast array of appropriate technology systems and devices Unique coverage on healthcare, basic business and project management, principles of design, promotion, scheduling, training, microlending, and more Teachers, doctors, construction workers, forest and agricultural specialists, scientists and healthcare workers, and religious and government representatives will find this book a first source for advice Step-by-step instructions and illustrations showing how to build and maintain a vast array of appropriate technology systems and devices Unique coverage on healthcare, basic business and project management, principles of design, promotion, scheduling, training, microlending, and more Teachers, doctors, construction workers, forest and agricultural specialists, scientists and healthcare workers, and religious and government representatives will find this book a first source for advice

HANDBOOK OF NETWORKS IN POWER SYSTEMS I

Springer Science & Business Media Energy has been an inevitable component of human lives for decades. Recent rapid developments in the area require analyzing energy systems not as independent components but rather as connected interdependent networks. The *Handbook of Networks in Power Systems* includes the state-of-the-art developments that occurred in the power systems networks, in particular gas, electricity, liquid fuels, freight networks, as well as their interactions. The book is separated into two volumes with three sections, where one scientific paper or more are included to cover most important areas of networks in power systems. The first volume covers topics arising in electricity network, in particular electricity markets, smart grid, network expansion, as well as risk management. The second volume presents problems arising in gas networks; such as scheduling and planning of natural gas systems, pricing, as well as optimal location of gas supply units. In addition, the second volume covers the topics of interactions between energy networks. Each subject is identified following the activity on the domain and the recognition of each subject as an area of research. The scientific papers are authored by world specialists on the domain and present either state-of-the-arts reviews or scientific developments.

HANDBOOK OF LARGE HYDRO GENERATORS

OPERATION AND MAINTENANCE

John Wiley & Sons This book offers comprehensive coverage of the operation and maintenance of large hydro generators This book is a practical handbook for engineers and maintenance staff responsible for the upkeep of large salient-pole hydro generators used in electric power plants. Focusing on the physics and maintenance of large vertical salient pole generators, it offers readers real-world experience, problem description, and solutions, while teaching them about the design, modernization, inspections, maintenance, and operation of salient pole machines. *Handbook of Large Hydro Generators: Operation and Maintenance* provides an introduction to the principles of operation of synchronous machines. It then covers design and construction, auxiliary systems, operation and control,

and monitoring and diagnostics of generators. Generator protection, inspection practices and methodology and auxiliaries inspections are also examined. The final two chapters are dedicated to maintenance and testing, and maintenance philosophies, upgrades, and updates. The handbook includes over 420 color photos and 180 illustrations, forms, and tables to complement the topics covered in the chapters. Written with a machine operator and inspector in mind, Handbook of Large Hydro Generators: Operation and Maintenance: Instructs readers how to perform complete machine inspections, understand what they are doing, and find solutions for any problems encountered. Includes real-life, practical, field experiences so that readers can familiarize themselves with aspects of machine operation, maintenance, and solutions to common problems. Benefits experienced and new power plant operators, generator design engineers and operations engineers. Is authored by industry experts who participated in the writing and maintenance of IEEE standards (IEEE C50.12 and C50.13) on the subject Handbook of Large Hydro Generators: Operation and Maintenance is an ideal resource for scientists and engineers whose research interest is in electromagnetic and energy conversion. It is also an excellent book for senior undergraduate and graduate students majoring in energy generation, and generator operation and maintenance.

POWER GENERATION TECHNOLOGIES

Elsevier This book makes intelligible the wide range of electricity generating technologies available today, as well as some closely allied technologies such as energy storage. The book opens by setting the many power generation technologies in the context of global energy consumption, the development of the electricity generation industry and the economics involved in this sector. A series of chapters are each devoted to assessing the environmental and economic impact of a single technology, including conventional technologies, nuclear and renewable (such as solar, wind and hydropower). The technologies are presented in an easily digestible form. Different power generation technologies have different greenhouse gas emissions and the link between greenhouse gases and global warming is a highly topical environmental and political issue. With developed nations worldwide looking to reduce their emissions of carbon dioxide, it is becoming increasingly important to explore the effectiveness of a mix of energy generation technologies. Power Generation Technologies gives a clear, unbiased review and comparison of the different types of power generation technologies available. In the light of the Kyoto protocol and OSPAR updates, Power Generation Technologies will provide an invaluable reference text for power generation planners, facility managers, consultants, policy makers and economists, as well as students and lecturers of related Engineering courses. · Provides a unique comparison of a wide range of power generation technologies - conventional, nuclear and renewable · Describes the workings and environmental impact of each technology · Evaluates the economic viability of each different power generation system

RENEWABLE HYDROPOWER TECHNOLOGIES

BoD - Books on Demand For many years, hydropower played an essential role in the development of humanity and has a long and successful track record. It is a conventional renewable energy source for generating electricity in small- and large-scale production. Due to its important utilization and future prospects, various interesting topics of research related to hydroelectric power generation are covered in this book. This book is the result of significant contributions from several researchers and experts worldwide. It is hoped that the book will become a useful source of information and basis for extended research for researchers, academics, policy makers, and practitioners in the area of renewable hydropower technologies.

POWER PLANT ENGINEERING

New Age International This Text-Cum-Reference Book Has Been Written To Meet The Manifold Requirement And Achievement Of The Students And Researchers. The Objective Of This Book Is To Discuss, Analyses And Design The Various Power Plant Systems Serving The Society At Present And Will Serve In Coming Decades India In Particular And The World In General. The Issues Related To Energy With Stress And Environment Up To Some Extent And Finally Find Ways To Implement The Outcome. Salient Features# Utilization Of Non-Conventional Energy Resources# Includes Green House Effect# Gives Latest Information S In Power Plant Engineering# Include Large Number Of Problems Of Both Indian And Foreign Universities# Rich Contents, Lucid Manner

HANDBOOK OF GEOTECHNICAL INVESTIGATION AND DESIGN TABLES

CRC Press This practical handbook of properties for soils and rock contains, in a concise tabular format, the key issues relevant to geotechnical investigations, assessments and designs in common practice. In addition, there are brief notes on the application of the tables. These data tables are compiled for experienced geotechnical professionals who require a reference document to access key information. There is an extensive database of correlations for different applications. The book should provide a useful bridge between soil and rock mechanics theory and its application to practical engineering solutions. The initial chapters deal with the planning of the geotechnical investigation, the classification of the soil and rock properties and some of the more used testing is then covered. Later chapters show the reliability and correlations that are used to convert that data in the interpretative and assessment phase of the project. The final chapters apply some of these concepts to geotechnical design. This book is intended primarily for practicing geotechnical engineers working in investigation, assessment and design, but should provide a useful supplement for postgraduate courses.

ENGINEERING FUNDAMENTALS: AN INTRODUCTION TO ENGINEERING, SI EDITION

Cengage Learning Specifically designed as an introduction to the exciting world of engineering, ENGINEERING FUNDAMENTALS: AN INTRODUCTION TO ENGINEERING encourages students to become engineers and prepares them with a solid foundation in the fundamental principles and physical laws. The book begins with a discovery of what engineers do as well as an inside look into the various areas of specialization. An explanation on good study habits and what it takes to succeed is included as well as an introduction to design and problem solving, communication, and ethics. Once this foundation is established, the book moves on to the basic physical concepts and laws that students will encounter regularly. The framework of this text teaches students that engineers apply physical and chemical laws and principles as well as mathematics to design, test, and supervise the production of millions of parts, products, and services that people use every day. By gaining problem solving skills and an understanding of fundamental principles, students are on their way to becoming analytical, detail-oriented, and creative engineers. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

RENEWABLE ENERGY RESOURCES

Taylor & Francis "This second edition maintains the book's basis on fundamentals, whilst including experience gained from the rapid growth of renewable energy technologies as secure national resources and for climate change mitigation, more extensively illustrated with case studies and worked problems. The presentation has been improved throughout, along with a new chapter on economics and institutional factors. Each chapter begins with fundamental theory from a scientific perspective, then considers applied engineering examples and developments, and includes a set of problems and solutions and a bibliography of printed and web-based material for further study. Common symbols and cross referencing apply throughout, essential data are tabulated in appendices. Sections on social and environmental aspects have been added to each technology chapter." -- back cover.

STEEL PENSTOCKS

Amer Society of Civil Engineers MOP 79 provides practical, comprehensive guidance regarding the technical, economic, safety, and environmental aspects of designing and implementing steel penstocks at hydroelectric power stations.

SUSTAINABLE ENERGY

CHOOSING AMONG OPTIONS

MIT Press Evaluates trade-offs and uncertainties inherent in achieving sustainable energy, analyzes the major energy technologies, and provides a framework for assessing policy options.

THE SAP MATERIALS MANAGEMENT HANDBOOK

CRC Press Although tens of thousands of global users have implemented Systems, Applications, and Products (SAP) for enterprise data processing for decades, there has been a need for a dependable reference on the subject, particularly for SAP materials management (SAP MM). Filling this need, The SAP Materials Management Handbook provides a complete understanding of how to best configure and implement the SAP MM module across various types of projects. It uses system screenshots of real-time SAP environments to illustrate the complete flow of business transactions involved with SAP MM. Supplying detailed explanations of the steps involved, it presents case studies from actual projects that demonstrate how to convert theory into powerful SAP MM solutions. Includes tips on the customization required for procurement of materials and inventory management Covers the range of business scenarios related to SAP MM, including the subcontracting cycle and consignment cycle Provides step-by-step guidance to help you implement your own SAP MM module Illustrates the procure to pay lifecycle Depicts critical business flows with screenshots of real-time SAP environments This much-needed reference explains how to use the SAP MM module to take care of the range of business functions related to purchasing, including purchase orders, purchase requisitions, outline contracts, and request for quotation. It also examines all SAP MM inventory management functions such as physical inventory, stock overview, stock valuation, movement types, and reservations—explaining how SAP MM can be used to define and maintain materials in your systems.

HYDROGENERATOR DESIGN MANUAL

HANDBOOK OF ELECTRIC POWER CALCULATIONS

McGraw Hill Professional A bestselling calculations handbook that offers electric power engineers and technicians essential, step-by-step procedures for solving a wide array of electric power problems. This edition introduces a complete electronic book on CD-ROM with over 100 live calculations--90% of the book's calculations. Updated to reflect the new National Electric Code advances in transformer and motors; and the new system design and operating procedures in the electric utility industry prompted by deregulation.

HANDBOOK OF RESEARCH ON SMART COMPUTING FOR RENEWABLE ENERGY AND AGRO-ENGINEERING

IGI Global The rise in population and the concurrently growing consumption rate necessitates the evolution of agriculture to adopt current computational technologies to increase production at a faster and smoother scale. While existing technologies may help in crop processing, there is a need for studies that seek to understand how modern approaches like artificial intelligence, fuzzy logic, and hybrid algorithms can aid the agricultural process while utilizing energy sources efficiently. The Handbook of Research on Smart Computing for Renewable Energy and Agro-Engineering is an essential publication that examines the benefits and barriers of implementing computational models to agricultural production and energy sources as well as how these models can produce more cost-effective and sustainable solutions. Featuring coverage on a wide range of topics such as bacterial foraging, swarm intelligence, and combinatorial optimization, this book is ideally designed for agricultural engineers, farmers, municipal union leaders, computer scientists, information technologists, sustainable developers, managers, environmentalists, industry professionals, academicians, researchers, and students.

HANDBOOK OF RESEARCH ON HYDROINFORMATICS: TECHNOLOGIES, THEORIES AND APPLICATIONS

TECHNOLOGIES, THEORIES AND APPLICATIONS

IGI Global "This book provides relevant theoretical frameworks and empirical research findings in the area hydroinformatics to assist professionals to improve their understanding of the development and use of decision support tools to support decision making and integrated water management at different organizational levels and domains"--Provided by publisher.

HANDBOOK OF RENEWABLE ENERGY TECHNOLOGY

World Scientific Effects of environmental, economic, social, political and technical factors have led to the rapid deployment of various sources of renewable energy-based power generation. The incorporation of these generation technologies have led to the development of a broad array of new methods and tools to integrate this new form of generation into the power system network. This book, arranged into six sections, highlights various renewable energy based generation technologies, and consists a series of papers written by experts in their respective fields of specialization. The Handbook of Renewable Energy Technology will be of great practical benefit to professionals, scientists and researchers in the relevant industries, and will be of interest to those of the general public wanting to know more about renewable energy technologies.

WATER HAMMER

PRACTICAL SOLUTIONS

Elsevier Water hammer, or the study of fluid transient behaviour, is one of the most common problems in the water engineering community. This book covers the many causes and solutions in a practical way and is an essential reference for all those concerned with the flow of liquids, not just water, in pipe systems. It follows on from the authors' previous monograph on the problems and solutions of water hammer and presents common problems in the form of case studies. This is an interesting and useful read for practising engineers working in this area and it will enable them to make comparisons with their own problems. Also the practical nature of the book makes it useful for civil engineering departmental libraries and departments where hydraulic design is taught.

MANAGING GLOBAL WARMING

AN INTERFACE OF TECHNOLOGY AND HUMAN ISSUES

Academic Press Managing Global Warming: An Interface of Technology and Human Issues discusses the causes of global warming, the options available to solve global warming problems, and how each option can be realistically implemented. It is the first book based on scientific content that presents an overall reference on both global warming and its solutions in one volume. Containing authoritative chapters written by scientists and engineers working in the field, each chapter includes the very latest research and references on the potential impact of wind, solar, hydro, geo-engineering and other energy technologies on climate change. With this wide ranging set of topics and solutions, engineers, professors, leaders and policymakers will find this to be a valuable handbook for their research and work. Presents chapters that are accompanied by an easy reference summary Includes up-to-date options and technical solutions for global warming through color imagery Provides up-to-date information as presented by a collection of renowned global experts
