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Handbook of Research on Machine Learning Innovations and Trends Elsevier Health Sciences

Proceedings of the 5th International Technical Conference on Hydraulic Engineering (CHE V), December 15-17, 2017, Shanghai, PR China Trans Tech Publications Ltd

A comprehensive resource on different aspects of sustainable carbon capture technologies including recent process developments, environmentally friendly methods, and roadmaps for implementations. It discusses also the socioeconomic and policy aspects of carbon capture and the challenges,

opportunities, and incentives for change with a focus on industry, policy, and governmental sector. Through applications in various fields of environmental health, and four selected case studies from four different practical regimes of carbon capture, the book provides guidelines for sustainable and responsible carbon capture and addresses current and future global energy, environment, and climate concerns.

<u>Geological Carbon Storage</u> Springer

This volume contains 73 papers presented at CSI 2014: Emerging ICT for Bridging the Future: Proceedings of the 49th Annual Convention of Computer Society of India. The convention was held during 12-14, December, 2014 at Hyderabad, Telangana, India. This volume contains papers mainly focused on Fuzzy Systems, Image Processing, Software Engineering, Cyber Security and Digital Forensic, E-Commerce, Big Data, Cloud Computing and ICT applications.

<u>Research in Interactive Design (Vol. 4)</u> IGI Global Swarm Intelligence has recently emerged as a next-generation methodology belonging to the class of evolutionary computing. As a result, scientists have been able to explain and understand real-life processes and practices that previously remained unexplored. The Handbook of Research on Swarm Intelligence in Engineering presents the latest research being conducted on diverse topics in intelligence technologies such as Swarm Intelligence, Machine Intelligence, Optical Engineering, and Signal Processing with the goal of advancing knowledge and applications in this rapidly evolving field. The enriched interdisciplinary contents of this book will be a subject of interest to the widest forum of faculties, existing research communities, and new research aspirants from a multitude of disciplines and trades.

John Wiley & Sons

In recent years, nanotechnology is the basis for the development of modern production. This determined the urgency of the intensive development of the new direction of mechanics and nanomechanics, for the scientific description of nanotechnological processes and the solution of several topical nanotechnology problems. Topics included in the book cover a wide range of research in the field of nanomechanics: thermomass theory of nanosystems; deformation of nanomaterials; interface mechanics of assembly carbon nanotube; nanomechanics on surface; molecular interactions and transformations; nanomechanical sensors, nanobeams, and micromembranes; nanostructural organic and inorganic materials; green synthesis of metallic nanoparticles. The main goal of these works is the establishment of the nanosystem macroparameter dependence on its nanoparameters using nanomechanics. This book will be useful for engineers, technologists, and researchers interested in methods of nanomechanics and in advanced nanomaterials with complex behavior and their applications.

National Academies Press

Sustainability Concept in Developing Countries is a collection of seven studies addressing the issue of sustainability from the perspective of developing countries. Although it is not a comprehensive review of all developing countries, these contributions do portray some of the major issues in achieving

sustainability in many developing countries. The book is divided into two parts: Part 1 includes chapters chemistry and characterization by the use of X-Ray diffraction, FT-IR, EDX, scanning electron related to concepts and methodology relevant to sustainability in the context of developing countries. Part 2 presents some actual case studies including descriptions of the situations and advice on how to address sustainability in such economies. This book is a useful reference for professionals in developing countries as well as other jurisdictions.

Emerging ICT for Bridging the Future - Proceedings of the 49th Annual Convention of the Computer Society of India (CSI) Volume 1 Springer

Fuzzy logic techniques have had extraordinary growth in various engineering systems. The developments in engineering sciences have caused apprehension in modern years due to hightech industrial processes with ever-increasing levels of complexity. Advanced Fuzzy Logic Approaches in Engineering Science provides innovative insights into a comprehensive range of a major concern of the Board and executive management. An integrated and soft fuzzy logic techniques applied in various fields of engineering problems like fuzzy sets theory, adaptive neuro fuzzy inference system, and hybrid fuzzy logic genetic algorithms belief networks in industrial and engineering settings. The content within this publication represents the work of particle swarms, fuzzy computing, and rough sets. It is a vital reference source for engineers, research scientists, academicians, and graduate-level students seeking coverage on topics centered on the applications of fuzzy logic in high-tech industrial processes.

Nanotechnology for Chemical Engineers CRC Press

Study of nature and the world around us has been a primary motivation for scientists and researchers for centuries. Advanced methods in the study of elementary particles have led to even greater discoveries in recent years. Innovative Applications and Developments of Micro-Pattern Gaseous Detectors focuses on the analysis and use of various gas detection systems, providing a detailed description of some of the most commonly used gas detectors and the science behind them. From early detectors to modern tools and techniques, this book will be of particular use to practitioners and researchers in chemical engineering and materials science, in addition to students and academicians concentrating in the field.

Next Generation Science Standards IGI Global

Environmental nanotechnology is considered to play a key role in shaping of current environmental engineering and science practices. This book titled "Environmental Nanotechnology" covers the advanced materials, devices, and system development for use in the environmental protection. The development of nano-based materials, understanding their chemistry and characterization using techniques like X- Ray diffraction, FT-IR, EDX, scanning electron microscope (SEM), transmission electron microscope (TEM), high resolution-TEM, etc. is included. It also highlights the scope for their applications in environmental protection, environmental remediation and environmental biosensors for detection, monitoring and assessment. Key Features: Covers basic to advanced Nano-based materials, their synthesis, development, characterization and applications and all the updated information related to environmental nanotechnology. Discusses implications of nanomaterials on the environment and applications of nanotechnology to protect the environment. Illustrates specific topics such as ethics of nanotechnology development, Nano-biotechnology, and application in wastewater technology. Includes applications of nanomaterials for combating global climate change and carbon sequestration. Gives examples of field applications of environmental nanotechnology. This book covers advanced materials, devices, and system developments for use in environmental protection. The development of nano-based materials, understanding its

microscope (SEM), transmission electron microscope (TEM), and high resolution-TEM give the scope for their application in environmental protection, environmental remediation, and environmental biosensors for detection, monitoring, and assessment. The green chemistry based on nano-based materials prevents pollution and controls environmental contaminants. Shaping the Future of ICT UM Libraries In all enterprises around the world, the issues, opportunities and challenges of aligning IT more closely with the organization and effectively governing an organizations IT investments, resources, major initiatives and superior uninterrupted service is becoming comprehensive approach to the alignment, planning, execution and governance of IT and its resources has become critical to more effectively align, integrate, invest, measure, deploy, service and sustain the strategic and tactical direction and value proposition of IT in support of organizations. Much has been written and documented about the individual components of IT Governance such as strategic planning, demand management, program and project management, IT service management, strategic sourcing and outsourcing, performance management, metrics, compliance and others. Much less has been written about a comprehensive and integrated approach The Global Practice of Forensic Science CRC Press Over the past decade, integrated STEM education research has emerged as an international concern, creating around it an imperative for technological and disciplinary innovation and a global resurgence of interest in teaching and learning to code at the K-16 levels. At the same time, issues of democratization, equity, power and access, including recent decolonizing efforts in public education, are also beginning to be acknowledged as legitimate issues in STEM education. Taking a reflexive approach to the intersection of these concerns, this book presents a collection of papers making new theoretical advances addressing two broad themes: Transdisciplinary Approaches in STEM Education and Bodies, Hegemony and Decolonization in STEM Education. Within each theme, praxis is of central concern including analyses of teaching and learning that re-imagines disciplinary boundaries and domains, the relationship between Art and STEM, and the design of learning technologies, spaces and environments. In addition to graduate research seminars at the Masters and PhD levels in Learning Sciences, Science Education, Educational Technology and STEM education, this book could also serve as a textbook for graduate and pre-service teacher education courses. University of Michigan Official Publication IGI Global This book discusses different innovative business models adopted by social enterprises to bring about social change in terms of creating capabilities among the marginalised section of people. These models also bring the sustainability of the enterprises to serve the people continuously. Establishing a theoretical base for further research in the area of business models in social entrepreneurship, the book consists of research work from various disciplines from scholars with experience and insights on social entrepreneurship, and who discuss one or more aspect(s) of business model, presenting their work with sound research methodologies. The book takes a broader view of the concept -a) social entrepreneurs are driven by social value and justice, b) social entrepreneur may or may not have a market orientation, c) social entrepreneurs solve variety of social problems such as poverty, health, illiteracy, environmental degradation using the principles of business and with the help of social innovation, and d) social enterprise focus on bringing social change by creating social impact. Chapters of this

book are divided into three core themes. The first one - Concepts, Patterns and Values includes contributions related to sustainable development, business model and vale creation in the context of social entrepreneurship, innovation and cross-cultural influence on business models aspects. The chapter of second theme – Enablers and Influencers – discuss role of corporate in promoting social entrepreneurship as a social responsibility, social entrepreneurship and value creation, BoP market, supply chain, structural and infrastructural choices, family as a stakeholder of indigenous enterprise, and women entrepreneurship. The third and final theme - Innovation - addresses social, open innovation and business model innovations, IPR, firm performance, collaboration and alliance, software and biotechnology industries, decision logic behind social enterprise creation, and strategy and strategic philanthropy concepts. Containing contributions from academia, industry professionals, investors, policy-makers, and other professionals, all from multiple disciplines, the book would interest the same vast audience.

Critical, Transdisciplinary and Embodied Approaches in STEM Education Springer Next Generation Science Standards identifies the science all K-12 students should know. These new standards are based on the National Research Council's A Framework for K-12 Science Education. The National Research Council, the National Science Teachers Association, the American Association for the Advancement of Science, and Achieve have partnered to create standards through a collaborative state-led process. The standards are rich in content and practice and arranged in a coherent manner across disciplines and grades to provide all students an internationally benchmarked science education. The print version of Next Generation Science Standards complements the nextgenscience.org website and: Provides an authoritative offline reference to the standards when creating lesson plans Arranged by grade level and by core discipline, making information quick and easy to find Printed in full color with a lay-flat spiral binding Allows for bookmarking, highlighting, and annotating

Trends in Information Technology, Communications Engineering, and Management IGI Global

with a particular focus on chemical engineering fundamentals. This book provides vital information about differences between descriptive technology and quantitative engineering for students as well as working professionals in various fields of nanotechnology. Besides chemical engineering principles, the fundamentals of nanotechnology are also covered along with detailed explanation of several specific nanoscale processes from chemical engineering point of view. This information is presented in form of practical examples and case studies that help the engineers and researchers to integrate the processes which can meet the commercial production. It is worth mentioning here that, the main challenge in nanostructure and nanodevices production is nowadays related to the economic point of view. The uniqueness of this book is a balance between important insights into the synthetic methods of nano-structures and nanomaterials and their applications with chemical engineering rules that educates the readers about nanosclale process design, simulation, modelling and optimization. Briefly, the book takes the readers through a journey from fundamentals to frontiers of engineering of nanoscale processes and informs them about industrial perspective research challenges, opportunities and synergism in chemical Engineering and nanotechnology. Utilising this information the readers can make informed decisions on their career and business.

Advanced Fuzzy Logic Approaches in Engineering Science CRC Press With enterprises world over redefining the very purpose of their existence from profitmaking to include societal and environmental responsibilities, sustainability has taken a centre stage for these business entities. Governments, not-for-profit organizations and social activist groups are also equally concerned about the overall impact of economic development on environmental and societal fabric. It is in this context, that ICSMS-2015 aims at sharing research and experience based knowledge among researchers, academicians, policy-makers, industry veterans, NGOs, consultants, students and practitioners in their respective fields.

Research Anthology on Privatizing and Securing Data Springer Nature For most professions, a code of ethics exists to promote positive behavior among practitioners in order to enrich others within the field as well as the communities they serve. Similar to the medical, law, and business fields, the engineering discipline also instills a code of ethical conduct. Contemporary Ethical Issues in Engineering highlights a modern approach to the topic of engineering ethics and the current moral dilemmas facing practitioners in the field. Focusing on key issues, theoretical foundations, and the best methods for promoting engineering ethics from the pre-practitioner to the managerial level, this timely publication is ideally designed for use by engineering students, active professionals, and academics, as well as researchers in all disciplines of engineering. Handbook of Research on Swarm Intelligence in Engineering Pen2Print Whether you want to start a new business, or improve or diversify an existing operation, this unique text collects for the first time essential information on the demand for high-value foods. their production, marketing and quality management. Aiming to raise awareness of opportunities in high-value foods and ingredients in ACP countries, the handbook also highlights routes to access different types of value chains for these products. Clearly laid out, with helpful summaries and 'tips for success', this comprehensive publication presents numerous real-life case studies to inspire entrepreneurs to improve their production and profitability.

Concepts, Methodologies, Tools, and Applications IGI Global The book describes the basic principles of transforming nano-technology into nano-engineering Continuous improvements in technological applications have allowed more opportunities to develop automated systems. This not only leads to higher success in smart data analysis, but it increases the overall probability of technological progression. The Handbook of Research on Machine Learning Innovations and Trends is a key resource on the latest advances and research regarding the vast range of advanced systems and applications involved in machine intelligence. Highlighting multidisciplinary studies on decision theory, intelligent search, and multi-agent systems, this publication is an ideal reference source for professionals and researchers working in the field of machine learning and its applications.

Chemical Engineering- Towards Sustainability and Intensification BoD – Books on Demand

Advances in chemical engineering are focused on intensification of reactions, unit operations and mechanical operations. Intensification facilitates reduction in cost, size and increase in conversion, separation and selectivity. In case of distillation, reactive distillation can reduce energy cost and increase product quality considerably compared to conventional reactor- separator method. Similar advantages can be considered for

reaction adsorption and other reactive separations. Use of non-renewable energy sources can reduce burden on conventional feed stocks and reduce carbon foot prints. Nano materials are gaining importance due to their unique properties. Application of nanomaterial for process intensification is being explored in mass transfer, heat transfer and reaction engineering. The composition of flue gases depends on raw material and process. It is important to have adequate knowledge of these aspects while selecting treatment methods. Various chemical conversion methods are effective for the treatment medication doses. The reference of choice for every stage of your career! Goldmanof flue gases. The recovery of components from flue gases involves adsorption, absorption, stripping, and desorption methods. This book contains one chapter on food adulteration also. Food adulteration is very increasing and dangerous phenomenon. It is being practiced from ancient times. Adulteration for maximizing profit is very commonly practiced unethical practice. There is need for increasing moral and ethical values. There is need for people friendly methods for analysing or at least identification of adulterations. Also use of branded items can minimize harms due to adulteration. The chapters in this book are focused on non-renewable energy (chapters 1, 5, 9), water treatment and recycle (chapters 4, 10, 11, 12), use of advanced materials for catalysts (chapters 2, 3, 13), flue gas heat recovery (14), Intensification of unit operations (5, 6, 7, 8) and adulteration in food products.

Proceedings of the International Conference in Emerging Trends in Engineering, Science and Technology (ICETEST 2018), January 18-20, 2018, Thrissur, Kerala, India Springer

Since 1927, Goldman-Cecil Medicine has been the world's most influential internal medicine resource. In the ground-breaking 25th edition, your original purchase ensures you will be up-to-date without the need for a subscription. Through the new, more powerful Expert Consult eBook platform, this "living text" provides continuous updates that will integrate the latest research, guidelines, and treatments into each chapter, ensuring that the content is as current as the day this edition was first published. Goldman-Cecil Medicine offers definitive, unbiased guidance on the evaluation and management of every medical condition, presented by a veritable "Who's Who" of modern medicine. A practical, straightforward style; templated organization; evidencebased references; and robust interactive content combine to make this dynamic resource guite simply the fastest and best place to find all of the authoritative, state-ofthe-art clinical answers you need. Expert Consult eBook version included with print purchase: Access continuous updates from Editor Lee Goldman, MD, who thoroughly reviews internal medicine and specialty journals, updating online content to reflect the latest guidelines and translating that evidence into treatment. Interactive Q&A section features over 1,500 board-style questions and answers to aid in preparing for certification or recertification exams. Outstanding supplementary tools include figures, tables, videos, heart and lung sounds, treatment and management algorithms, fully integrated references, and thousands of illustrations and full-color photos. Search all of the text, figures, supplementary material, and references from the book on a variety of devices and at no additional cost — Expert Consult access is included with this title!

Practical, bulleted, highly templated text with easy-to-use features including flow charts and treatment boxes. New chapters on global health, cancer biology and genetics, and the human microbiome in health and disease keep you on the cutting edge of medicine. Today's most current evidence-based medicine guidelines help you form a definitive diagnosis and create the best treatment plans possible. Focused coverage of the latest developments in biology includes the specifics of current diagnosis, therapy, and Cecil Medicine is an ideal learning tool for residents, physicians, and students as well as a valuable go-to resource for experienced healthcare professionals.