Global Formaldehyde Market 2015 2019

EDEN PAMELA

Airborne Particles and Settled Dust Woodhead Publishing
Millions of Americans use e-cigarettes. Despite their popularity, little is known about their health effects. Some suggest that e-cigarettes likely confer lower risk compared to combustible tobacco cigarettes, because they do not expose users to toxicants produced through combustion. Proponents of e-cigarette use also tout the potential benefits of e-cigarettes as devices that could help combustible tobacco cigarette smokers to quit and thereby reduce tobacco-related health risks. Others are concerned about the exposure to potentially toxic substances contained in e-cigarette emissions, especially in individuals who have never used tobacco products such as youth and young adults. Given their relatively recent introduction, there has been little time for a scientific body of evidence to develop on the health effects of e-cigarettes. Public Health Consequences of E-Cigarettes reviews and critically assesses the state of the emerging evidence about e-cigarettes and health. This report makes recommendations for the improvement of this research and highlights gaps that are a priority for future research.
Grand Challenges in Marine Biotechnology MDPI
ICSSCCET 2015 will be the most comprehensive conference focused on the various aspects of advances in Systems, Science, Management, Medical Sciences, Communication, Engineering, Technology, Interdisciplinary Research Theory and Technology. This Conference provides a chance for academic and industry professionals to discuss recent progress in the area of Interdisciplinary Research Theory and Technology. Furthermore, we expect that the conference and its publications will be a trigger for further related research and technology improvements in this important subject. The goal of this conference is to bring together the researchers from academia and industry as well as practitioners to share ideas, problems and solutions relating to the multifaceted aspects of Interdisciplinary Research Theory and Technology.
Product Emission and Combustion Health Hazards Duke University Press
Wood composites as part of wood engineering materials has been reaching a constant developing trend, being used on a wide range of applications and becoming worldwide as a very promising alternate material face to traditional building materials such as concrete, metal and plastics. In this part of the series are treated aspects among which advances functionalities in laminates, the activation of natural fibres, the natural matrix, and others industrials manufacturing research advances for wood material as composite.
Bioremediation: Applications for Environmental Protection and Management World Scientific
In 2020, COVID-19 starkly demonstrated the global interconnectedness of business, as it disrupted supply chains and manufacturing operations, broadly shuttered retail stores, and led to restrictions on movement and travel around the world. Other events in 2019 also showcased the undeniable globalization of business, be it from the (un)expected ramifications of Brexit to the impacts of data breaches across various industries. Riots in Hong

Kong over an extradition bill also sparked huge debate and controversy, and the U.S.-China trade war also caused concern. All of these events may have largely and immediately impacted one region, yet effects reverberate across larger swathes of the globe—ultimately affecting vast areas, industries, and sectors across the international landscape. Issues in Global Business explores all of these and more, across a wide range of topics, including the on-demand economy, global manufacturing, Bitcoin, data security, and many more. Coupled with a comprehensive overview of the business landscape around the world by Dr. Mamoun Benmamoun, an assistant professor at the Boeing Institute of International Business at Saint Louis University, this book provides students with the essential information they need to assess business practices through an international lens.
Proceedings of the 5th International Conference on Management and Technology in Knowledge, Service, Tourism & Hospitality 2017 (SERVE 2017), 21-22 October 2017 & 30 November 2017, Bali, Indonesia & Moscow, Russia CRC Press
This book examines bioremediation technologies as a tool for environmental protection and management. It provides global perspectives on recent advances in the bioremediation of various environmental pollutants. Topics covered include comparative analysis of bio-gas electrification from anaerobic digesters, mathematical modeling in bioremediation, the evaluation of next-generation sequencing technologies for environmental monitoring in wastewater abatement; and the impact of diverse wastewater remediation techniques such as the use of nanofibers, microbes and genetically modified organisms; bioelectrochemical treatment; phytoremediation; and biosorption strategies. The book is targeted at scientists and researchers working in the field of bioremediation.
The Future of Fallout, and Other Episodes in Radioactive World-Making Oxford Business Group
Polymeric materials form the basis of daily life. Despite the great contribution of traditional methodologies such as anionic and radical polymerizations in preparing various functional polymers, the increasing demand for polymers with new structures and functions has inspired the development of new synthetic techniques. Many new polymerizations including click polymerization, controlled/living radical polymerization and multicomponent polymerization have been well developed. Focusing on breakthroughs and recent progress, Synthetic Polymer Chemistry provides efficient tools for the synthesis of linear and topological polymers. Chapters cover topics including fabrication of supramolecular polymers, organocatalytic synthesis and olefin co(polymerization). This title will be a valuable reference for those working in polymer chemistry, as well as students and researchers interested in opto-electronic, biological and materials sciences.
Advances in Wood Composites Springer
Adhesive bonding plays an increasing role in the forest product industry and is a key factor for efficiently utilizing timber and other lignocellulosic resources. As synthetic wood adhesives are mostly derived from depleting petrochemical resources and have caused increasing environmental concern, natural product and byproduct-derived adhesives have attracted much attention in the last decades. Although adhesives made from plant and animal sources have been in existence since ancient times, increased knowledge of their chemistry and improved technical formulation of their preparation are still needed to promote their broader industrial applications. The primary goals of this book are to (1) synthesize the fundamental knowledge and latest research on bio-based adhesives from a remarkable range of natural products and byproducts, (2) identify need areas and provide directions of future bio-based adhesive research, and (3) help integrating research findings in practical adhesive application for maximal benefits. This book covers information on a variety of natural products and byproducts and the latest research on formulation, testing and improvement of the relevant adhesives in fifteen chapters written by an international group of accomplished contributors. This book will serve as a valuable reference source for university faculty, graduate students, research scientists, agricultural and wood engineers, international organization advocators and government agency regulators who work and deal with enhanced utilization of agricultural and forest products and byproducts.
Advances in the Dyeing and Finishing of Technical Textiles Springer
In The Future of Fallout, and Other Episodes in Radioactive World-Making Joseph Masco examines the strange American intimacy with and commitment to existential danger. Tracking the simultaneous production of nuclear emergency and climate disruption since 1945, he focuses on the psychosocial accommodations as well as the technological revolutions that have produced these linked planetary-scale disasters. Masco assesses the memory practices, visual culture, concepts of danger, and toxic practices that, in combination, have generated a U.S. national security culture that promises ever more safety and comfort in everyday life but does so only by generating and deferring a vast range of violences into the collective future. Interrogating how this existential lag (i.e., the material and conceptual fallout of the twentieth century in the form of nuclear weapons and petrochemical capitalism) informs life in the twenty-first century, Masco identifies key moments when other futures were still possible and seeks to activate an alternative, postnational security political imaginary in support of collective life today.
Innovations and Outlook CRC Press
Formaldehyde is virtually ubiquitous in the modern environment due to its cost-effective nature, its use in resin formation, and its preservative properties. Though formaldehyde is necessary for many products and processes important to the world’s economy, this economic dependence on formaldehyde comes at a cost to public health. Growth and consequent industrialization rely heavily on formaldehyde use. New buildings—residences, public places, and offices—are not only built with timber preserved by formaldehyde, but they are also furnished with wood, wool, and textile products that contain formaldehyde. The general population faces environmental exposure from indoor and outdoor air pollution, food, and even medicine. Scientific inquiry into formaldehyde exposure has grown in response. This book consolidates the new and established body of formaldehyde research in the scholarly community, focusing on exposure, genotoxicity, and adverse health outcomes. Through this resource, we hope to increase awareness of the broad range of health effects posed by formaldehyde exposure, and to encourage interdisciplinary interest, as well as research, into this pervasive compound—especially in the United States and China, where formaldehyde production and usage is high. This book will be useful to researchers of environmental and occupational exposure, students, and government regulators and anyone exposed to formaldehyde in the workplace and/or at home.
International Conference on Environmental Science and Sustainable Development (ICESSD 2015) Springer Nature
This book serves as essential reading for research scientists and biotechnologists from both academia and industry working in marine biotechnology and related disciplines. The book discusses recent advances and challenges in terms of science, technology, innovation, and policy for the development of the field; and how marine biotechnology may provide new solutions to some of the grand challenges faced by our society. Written in an accessible language, the book is also recommended as a reference text for decision-makers in government and non-governmental organizations in their efforts to foster the development of a global blue economy. With less than 5 % of the vast and rich marine environment explored, our seas and oceans represent a virtually unexplored resource for the discovery of novel product, processes, and development of bio-inspired synthetic drugs with biotechnological potential. As such, the marine environment has been considered Earth's last frontier of exploration. Recent advances in molecular techniques are providing the necessary tools to access on a larger scale the still-untapped ocean resources and, consequently, unveil the promise of the blue biotechnology. Governments are recognizing the potential of marine biotechnology to provide solutions to some of the Grand Challenges of the 21st Century such as sustainable energy and food sources, identification of novel drugs for improved health treatments, and providing new industrial materials and processes. For this reason, advances in marine biotechnology may foster the much-needed source of innovation and economic growth in many countries, and pave the way towards the development of a global blue economy, i.e. a new economic model based on the sustainable exploration of our ocean ecosystems.
Energy and Chemical Engineering - Outcomes from the EFCE Energy Section in the 12th European Congress on Chemical Engineering (ECCE12) Woodhead Publishing
Despite troubled trade negotiations, global trade—and trade policy—will thrive in the twenty-first century, but with a bow to the past. Is the multilateral trading order of the twentieth century a historical artifact? Was the creation of the World Trade Organization in 1995 the high point of multilateral cooperation on trade? This new volume, edited by Bernard M. Hoekman and Ernesto Zedillo, assesses the relevance of the WTO in the context of the rise of China and the United States’ turn toward unilateral protectionism. The contributors adopt a historical perspective to discuss changes in global trade policy trends, adducing lessons from the past to help understand current trade tensions. Topics include responses to U.S. protectionism under the Trump administration, the policy dimensions of trade in services and the rise of the digital economy, how to strengthen the WTO to better negotiate new rules of the game and adjudicate disputes, managing China’s integration into the global trade system, and the implications of global value chains for economic development policies. By reflecting on past episodes of protectionism and how they were resolved, Trade in the 21st Century provides both context and guidance on how trade challenges can be addressed in the coming decades.
Bio-based Wood Adhesives Frontiers Media SA
The Global Gender and Environment Outlook (GGEO) provides an overview of critical evaluations and analyses of the interlinkages between gender and the environment, and their importance for gender-sensitive policymaking and actions. The GGEO was first proposed by the Network of Women Ministers and Leaders for the Environment (NWMLE) to UNEP at the United Nations Conference on Sustainable Development (Rio+20). The 2014 United Nations Environment Assembly subsequently welcomed the development of the GGEO, and the use of social science information and gender relevant indicators to examine the links between gender and the environment. The report describes policy options and concrete opportunities to contribute to the future we want - a future of justice and equality that leaves no one behind. It reflects and builds on the ground-breaking work of hundreds of scientists, policy experts, gender advocates and members of community groups. And it examines a wide range of topics, including food production, water and sanitation, energy, sustainable consumption and production, fisheries and fishing communities, and forests and those who depend on them for their livelihoods.
Synthetic Polymer Chemistry Springer Nature
This book provides the latest developments on safety practices utilized in composite manufacturing facilities for students, workers, engineers, and other participants. It includes commentary from academic experts in the field who present cutting-edge research on advanced composite materials. Illustrations, figures, and tables are included in this book in order to make it easier for students, workers, engineers, and other participants to understand the contents of this book. The end user knows the safety and health that should be practiced in composite industry and their right in composite industry. Besides that, the composites industry players can upgrade their current safety system to the recommended practiced system. A lot of problems are solved by integrate the current system and advanced technology system from extensive research.
Handbook of Composites from Renewable Materials, Structure and Chemistry Springer
This revised and updated new edition of a successful book is a multidisciplinary, comprehensive guide to occupational factors of malignant diseases. Building on the first edition, new research discoveries and their consequences in our understanding on carcinogenic mechanisms, diagnosis and attribution of occupational cancers are discussed. Examples of such discoveries are germline and acquired mutations of BAP1 in malignant mesothelioma, which have led to changes in diagnostic criteria, and carcinogen-specific genetic and epigenetic alterations in lung cancer. There are several new chapters, including gastrointestinal cancers, epidemiology of lung cancer, cancer of thyroid, and the role of primary health care in occupational cancer control. Occupational Cancers is aimed at experienced and trainee oncologists, pathologists, clinicians in occupational health, and pulmonologists, as well as epidemiologists, clinical researchers, lawyers and public health officials.
Preparation, Characterization, and Testing Royal Society of Chemistry
This proceedings is a collection of selected papers presented at the 2015 International Conference on Environmental Science and Sustainable Development (ICESSD 2015), which was held on October 25–26, 2015, Bangkok, Thailand. Issues covered include environment protection and sustainable development. Researchers working in these two areas should find results in the proceedings enlightening and topics discussed challenging. Contents:Environmental Pollution and Protection Engineering:Source Identification of Heavy Metals on Surface Soil in Guiyang City, China (L J Dai, X F Cai, J Wang, Y X Zhang and F Q Hu)Hazard Analysis and Protective Countermeasures of Dust Explosion in Dedusting System (J F Zhang, X Liu, Q Li, Y L Li and Y Hu)Digital Manufacturing: Way to the Environment Safe Factory (A A Kutin and N N Zakshevskaya)Disposal of Plastic Waste and Stone Dust: A Sustainable Development Approach (Thangjam Somchand Singh)Ambient Air Quality in Thailand: The Impact of Particulate and Gaseous pollutants on IAQ (Christopher O Muller, Henri Seng and Tavatchai Satienrattanakul)Investigation on Heavy Metal Enrichment Characteristics of Eight Weeds in Coalmine Wasteland, Eastern Guangdong (Y M Zhong, Q H Yang, X L Zeng, D L Liu and H N Liu)New Approach to Development of Flow Neutralization System for Exhaust Gases Purification (A A Vedyagin, I V Desyatykh, T A Maksimova and I V Mishakov)Statistical Relationship between

Dissolved and Suspended Components in an Electrically-Enhanced Membrane Bioreactor for Municipal Wastewater Treatment (A Giwa and S W Hasan)Enhancement of Anaerobic Biodegradability and Solubilization by Thermal Pre-Treatment of Waste Activated Sludge (S Y Jeong, J H Jeung, D H Moon and S W Chang)Liquid Recirculation System for Anaerobic Digestion Using Source Sorted Food Waste (C H Cho and B H Lee)Characteristics of Carbonization Residue with Mixture of Woody Waste and Sewage Sludge (H J Choi and S W Rhee)Research on Palladium Silver Alloy Resistance Hydrogen Sensor (Z T Geng and Q He)Power Analysis of Small Wind Turbine (K Y Huang, G C Tsai, G J Guo and C K Feng)Integrated Waste Management — Technology Transfer between Australia and Nepal (K Douglas, D Ionescu, B Mainali and J Petrolito)Northern Tibet Grassland Vegetation Index Factor Screening and Suitability Partition (G Q Zheng, H C Zheng and Y X Li)Remote Sensing of Suspended Particulate Matter Variability of the Global Coastal Waters Over the Last Decade (H Loisel, V Vantrepotte, D Dessailly, F Steinmetz and B Han)Risk Assessment on Storm Flood Disasters of Different Return Periods in Huai River Basin (Z T Zhang, N Li and C Gao)Effects of N and P Additions on Soil Nutrient and Biochemical Characteristics in an Acacia Mangium Stand (J Li, W L Huang, L Xue and Z Y Lie)Soil Characteristics of Tephrosia Candida Stands with Different Densities (Z Y Lie, J Li, L Xue and W L Huang)Diagnostics of the Influence of Suspended Solids and Phosphorus on Groundwater Quality (Lucie Teslikova Hurdalkova, Dagmar Kuta and Nada Zdrazilova)Analytical Research on Pollution Sources of PAHs in the Soil Based on Principal Component Analysis (PCA) (F Chen, Z W Cao and Y F Zhang)Strategic Approach to Develop Biological Washing in Global Scale (H K Zhang, J M H Chiang, M Plaisent and P Bernard)From the Perspective of Green Laws to Discuss the Green Environmental Performance of Manufacturers (S B Tsai)Determination of the Maximum Explosion Pressure of Coal Dust Clouds (R Kuracina, Z Szabova, M Mencik and P Cekan)Research of Multi-Functional Coastal Zoning and Evaluation Based on Principle Component Analysis (L Zhao, M M Song and Z D Xu)Residence Time Distribution and Disinfectant Mixing in Private Water Tanks (V G Tzatchkov, A Martin-Dominguez and R D Hernandez-Lopez)Analysis of Inconsistent Hydrological Frequency Based on TFPW-MK-Pettitt and EEMD (J Wu, Y F Chen and Q Hang)Energy Science and Sustainable Development:Energy Consumption of Ozone Generation and Dye Degradation by Using ZnO Photocatalytic Ozonation (Suntree Sangjan, Sirichai Puasawat and Channarong Uamthong)Nannochloropsis Oculata Algae as Biofuels: A Review on Two-Stage Culture (N A Zakariah, N Abd Rahman, F Hamzah, T Md Jahi and A Ismail)Life Cycle Assessment of Power Generation from Solar Energy in Thailand (W Khaenson, S Maneewan, C Punlek, S Chindaraksa and N Rachapradit)Wind Load Analysis and Temperature Measuring Experiment for Design and Fabrication of Solar Collecting System Combined Small Flat Mirrors (K H Song, C W Son, H S Ahn, K T Kim, T I Seo, B H Jo and J E Kim)Investigating Competitive Strategies of Renewable Energy Enterprises from the Perspective of Renewable Energy Law (S B Tsai)Air Steam Gasification of Coconut Shell in a Fluidized Bed (S Baskara Sethupathy and E Natarajan)Effect of Electrolyte Composition and Anodic Voltage on the Morphology of TiO2 Nanotube (Yongho Lee and Daewon Pak)Electrochemical Characteristics of IrO2 + TaO5 / Ti DSA Electrode (Jaemin Yoo and Daewon Pak)Effect of Temperature on Torrefaction of Food Waste Using Heat Carrier (Hyunsook Kim and Daewon Pak)Simulation on Improved Genetic Algorithm of The Ship's Superheated Steam Pressure (P Wang, S Zeng, R H Dai and G L Zhang)Methane Potential of Various Organic Wastes: Study of Biochemical Methane Potential (BMP) Test Before Co-Digestion (J H Jeung, D H Moon and S W Chang)The External Benefits of Expanding Organic Waste-To-Energy Facilities in Korea: A Contingent Valuation Study (S H Min, S Y Park and S H Yoo)The External Benefits of Expanding Organic Waste-To-Energy Facilities in Korea: A Choice Experiment Study (Hyo-Jin Kim, So-Yeon Park and Seung-Hoon Yoo)The Economic Effects of Expanding Organic Waste-To-Energy Facilities in Korea: An Input-Output Analysis (Yong-Cheol Cho, Min-Ji Baek and Seung-Hoon Yoo)A New Porous Catalytic Filter for CO2 Methanation (D H Moon, J H Jeung, S S Kim, and S W Chang)Cross-Country Analysis of the Sustainable Human Development Based on Slack-Based DEA (X Y Zhu, Y X Liu and S Q Ye)Road Asset Management for Sustainable Development (S Cafiso, A Di Graziano, C D'Agostino, G Pappalardo and B Capac)Assessment of Identified Risks in the Process of Preparing and Creating a Municipal Land Plan (J Betáková and J. Dvorský)Research on Re-Employment Condition of Flexible Employment (J Wu and X Wang)Factors Affecting Consumer's Choice for Electric Motorcycles: A Case in Macau (X Zhou, N Sheng and K P Liang)The Performance of a Batch Rotating Fixed Bed of Scrap Bearing Iron Spheres in Hexavalent Chromium Reduction (S Nabil, T M Zewail and N K Amin)Implementation and Design of Voltage-Mode CMOSPWM Boost Power Converter with Feed Forward and Feedback Control Circuit (Min-Chin Lee and Wen-Shiang Jung)Foundation Stability Research of Mat Jack-Up Oil-Storage-Offloading Platform (Y Gao, Z C Deng, S Wu and L P Sun)Biological and Medical Engineering:Study on the Pyrolysis of Seven Monosaccharides (C J Ru, Q D Zhang, S L Zhang, Y B Song, J X Zhang, Y L Zong, R P Han, J H Liu and Y Q Li)Study on Physical and Chemical Properties of 10 Species Phorophyte Canopy Humus of Epiphyte Ferns in Ailaoshan Mts., Yunnan, China (X L Li, J M Feng, X M Li, G S Li and C D Xu)Desulfurization of Oil by Recombinant Rhodococcus Gordoniae Strain R3 (Theeta Sricoth, Prayad Pokethitiyook, Toemthip Poolpak and Maleeya Kruatrachue)Bioinspired Neural Model of the Semantic Content (M Crisan)Noble Metal (Co-) Functionalized TiO2 Containing Photoreactive Hybrid Surfaces Against Antibiotic Resistant Staphylococcus Aureus and Escherichia Coli (I. Dékány, Sz P Tallósy and L Janovák)Trajectory Tracking Error between Plant, Reference and Adaptive Neural Networks Using Two Control Law for Two-Link Robot Manipulator (Joel Perez Padron and Jose Paz Perez Padron)Insecticidal Activity of Crude Extract from Seeds of Millettia Pachyarpa on Cabbage Aphid (T X Lin, M F Gong, Q L Guan and J N Mao)Screening of Endophytic Bacteria Isolated from Rice Plant Antagonistic Rice Sheath Blight (J N Mao, C H Xu and M F Gong)Disease Resistance Induction in Rice by Inoculation with Endophytic Bacteria Strain REB01 (J N Mao, X Y Zhang and M F Gong)Density Effect on the Nutrient Distribution of Elaeocarpus Sylvestris Seedlings (W L Huang, J Li, L Xue and Z Y Lie)Effects of Low Temperature Stress and Release on Fluorescence Indexes of Greening Seedlings of Three Tree Species (Z M Wang, T T Zhou and L Xue)The Bounded Rational Analysis and Treatment of Accounting Professional Judgment Behavior (S H Liu)Static Rigidness Test Analysis of Some Body-in-White Car (A L Sun, X L Tan, J Zhang, X L Zuo and W Peng)A Bilevel Programming Reformulation for a Single-Leg Flight Capacity Control Problem (R X Gao and H P Jiang)Author Index Readership: Researchers, academics, professionals and graduate students in environmental science.

Recent Advances in Polyphenol Research Wiley-Blackwell

Plant polyphenols are secondary metabolites that constitute one of the most common and widespread groups of natural products. They are crucial constituents of a large and diverse range of biological functions and processes, and provide many benefits to both plants and humans. Many polyphenols, from their structurally simplest representatives to their oligo/polymeric versions, are notably known as phytoestrogens, plant pigments, potent antioxidants, and protein interacting agents. This sixth volume of the highly regarded Recent Advances in Polyphenol Research series is edited by Heidi Halbwirth, Karl Stich, Véronique Cheynier and Stéphane Quideau, and is a continuance of the series' tradition of compiling a cornucopia of cutting-edge chapters, written by some of the leading experts in their respective fields of polyphenol sciences. Highlighted herein are some of the most recent and pertinent developments in polyphenol research, covering such major areas as: Chemistry and physicochemistry Biosynthesis, genetics & metabolic engineering Roles in plants and ecosystems Food, nutrition & health Applied polyphenols This book is a distillation of the most current information, and as such, will surely prove an invaluable source for chemists, biochemists, plant scientists, pharmacognosists and pharmacologists, biologists, ecologists, food scientists and nutritionists.

Chinese Environmental Humanities Walter de Gruyter GmbH & Co KG

Chinese Environmental Humanities showcases contemporary ecocritical approaches to Chinese culture and aesthetic production as practiced in China itself and beyond. As the first collaborative environmental humanities project of this kind, this book brings together sixteen scholars from a diverse range of disciplines, including literary and cultural studies, philosophy, ecocinema and ecomedia studies, religious studies, minority studies, and animal or multispecies studies. The fourteen chapters are conceptually framed through the lens of the Chinese term huanjing (environment or "encircling the surroundings"), a critical device for imagining the aesthetics and politics of place-making, or "the practice of environing at the margin." The discourse of environing at the margins facilitates consideration of the modes, aesthetics, ethics, and politics of environmental inclusion and exclusion, providing a lens into the environmental thinking and practices of the world's most populous society.

Proceedings of the International Conference on Systems, Science, Control, Communication, Engineering and Technology 2015 Springer Nature

Nanotechnology is increasingly used in the food industry in the production, processing, packaging, and preservation of foods. It is also used to enhance flavor and color, nutrient delivery, and bioavailability, and to improve food safety and in quality management. Nanotechnology Applications in the Food Industry is a comprehensive reference book containing exhaustive information on nanotechnology and the scope of its applications in the food industry. The book has five sections delving on all aspects of nanotechnology and its key role in food industry in the present scenario. Part I on Introduction to Nanotechnology in Food Sector covers the technological basis for its application in food industry and in agriculture. The use of nanosized foods and nanomaterials in food, the safety issues pertaining to its applications in foods and on market analysis and consumer perception of food nanotechnology has been discussed in the section. Part II on Nanotechnology in Food Packaging reviews the use of nanopolymers, nanocomposites and nanostructured coatings in food packaging. Part III on Nanosensors for Safe and Quality Foods provides an overview on nanotechnology in the development of biosensors for pathogen and food contaminant detections, and in sampling and food quality management. Part IV on Nanotechnology for Nutrient Delivery in Foods deals with the use of nanotechnology in foods for controlled and effective release of nutrients. Part V on Safety Assessment for Use of Nanomaterials in Food and Food Production deliberates on the benefits and risks associated with the extensive and long term applications of nanotechnology in food sector.

The Report: Qatar 2015 CRC Press

This book provides a global perspective on the various issues that the industry has to face as well as to provide some key global strategies that can help coping with those global challenges, such as collaboration, strategic value chain planning, and interdependency analyses. It presents literature reviews, strategic research orientations, assessment of some current key issues, and state-of-the-art methodologies.

Sustainability in the Textile Industry National Academies Press

Advances in Carbon Management Technologies comprises 43 chapters contributed by experts from all over the world. Volume 1 of the book, containing 23 chapters, discusses the status of technologies capable of yielding substantial reduction of carbon dioxide emissions from major combustion sources. Such technologies include renewable energy sources that can replace fossil fuels and technologies to capture CO2 after fossil fuel combustion or directly from the atmosphere, with subsequent permanent long-term storage. The introductory chapter emphasizes the gravity of the issues related to greenhouse gas emissionglobal temperature correlation, the state of the art of key technologies and the necessary emission reductions needed to meet international warming targets. Section 1 deals with global challenges associated with key fossil fuel mitigation technologies, including removing CO2 from the atmosphere, and emission measurements. Section 2 presents technological choices for coal, petroleum, and natural gas for the purpose of reducing carbon footprints associated with the utilization of such fuels. Section 3 deals with promising contributions of alternatives to fossil fuels, such as hydropower, nuclear, solar photovoltaics, and wind. Chapters 19 of this book is freely available as a downloadable Open Access PDF under a Creative Commons Attribution-Non Commercial-No Derivatives 4.0 license. The links can be found on the book's Routledge web page at https://www.routledge.com//9780367198428