

Biology Isa 6t June 2014 Aqa Paper

Evidence-Based Climate Science: Data Opposing CO2 Emissions as the Primary Source of Global Warming, Second Edition, includes updated data related to the causes of global climate change from experts in meteorology, geology, atmospheric physics, solar physics, geophysics, climatology, and computer modeling. This book objectively gathers and analyzes scientific data concerning patterns of past climate changes, influences of changes in ocean temperatures, the effect of solar variation on global climate, and the effect of CO2 on global climate. This analysis is then presented as counter-evidence to the theory that CO2 is the primary cause behind global warming. Increasingly, scientists are pointing to data which suggests that climate changes are a result of natural cycles, which have been occurring for thousands of years. Unfortunately, global warming has moved into the political realm without enough peer-reviewed research to fully validate and exclude other, more natural, causes of climate change. For example, there is an absence of any physical evidence that CO2 causes global warming, so the only argument for CO2 as the cause of warming rests entirely in computer modeling. Thus, the question becomes, how accurate are the computer models in predicting climate? What other variables could be missing from the models? In order to understand modern climate changes, we need to look at the past history of climate changes. Vast amounts of physical evidence of climate change over the past centuries and millennia have been gathered by scientists. Significant climate changes have clearly been going on for many thousands of years, long before the recent rise in atmospheric CO2 Evidence-Based Climate Science, Data Opposing CO2 Emissions as the Primary Source of Global Warming, Second Edition, documents past climate changes and presents physical evidence for possible causes. Provides scientific evidence for issues related to global climate change that is not readily available elsewhere Offers detailed analysis of temperature measurements with the goal of helping readers to understand conflicting claims about global warming heard every day in the news media Presents real-time data on polar ice Presents the real-time effect of CO2 on global warming, rather than forecasts based on computer models

This book discussing in detail the Social Life Cycle Assessment (SLCA) of the global economy using the comprehensive Multi-Regional Input-Output (MRIO) technique. The content is presented in two parts, the first of which offers an introduction to social accounting and how it has been developed over the past few years with details on the methodologies and databases used. The second part of the book describes the footprints of the social accounts that have the highest impact on people's well-being (employment, income, working conditions, and inequality) and how they are linked to international trade. The need for reporting on such indicators falls within the purview of corporate/national social responsibility (part of the Triple Bottom Line). The book offers a valuable contribution to the literature for researchers and students engaged in the social sciences, human rights, and the implications of international trade on labour in developing countries.iv>

Biopolitics and posthumanism have been passé theories in the academy for a while now, standing on the unfashionable side of the fault line between biology and liberal thought. These days, if people invoke them, they do so a bit apologetically. But, as Ruth Miller argues, we should not be so quick to relegate these terms to the scholarly dustbin. This is because they can help to explain an increasingly important (and contested) influence in modern democratic politics-that of nostalgia. Nostalgia is another somewhat embarrassing concept for the academy. It is that wistful sense of longing for an imaginary and unitary past that leads to an impossible future. And, moreover for this book, it is ordinarily considered "bad" for democracy. But, again, Miller says, not so fast. As she argues in this book, nostalgia is the mode of engagement with the world that allows thought and life to coexist, productively, within democratic politics. Miller demonstrates her theory by looking at nostalgia as a nonhuman

mode of "thought" embedded in biopolitical reproduction. To put this another way, she looks at mass democracy as a classically nonhuman affair and nostalgic, nonhuman reproduction as the political activity that makes this democracy happen. To illustrate, Miller draws on the politics surrounding embryos and the modernization of the Turkish alphabet. Situating this argument in feminist theories of biopolitics, this unusual and erudite book demonstrates that nostalgia is not as detrimental to democratic engagement as scholars have claimed.

This eBook is a collection of articles from a Frontiers Research Topic. Frontiers Research Topics are very popular trademarks of the Frontiers Journals Series: they are collections of at least ten articles, all centered on a particular subject. With their unique mix of varied contributions from Original Research to Review Articles, Frontiers Research Topics unify the most influential researchers, the latest key findings and historical advances in a hot research area! Find out more on how to host your own Frontiers Research Topic or contribute to one as an author by contacting the Frontiers Editorial Office: frontiersin.org/about/contact.

The End of the Cartesian dream

Practical Applications of Computational Biology & Bioinformatics, 14th International Conference (PACBB 2020)

Catalogue of the Manuscript Collections of the American Antiquarian Society

Data Opposing CO2 Emissions as the Primary Source of Global Warming

Sociology in Our Times

13th International Conference, DILS 2018, Hannover, Germany, November 20-21, 2018, Proceedings

This volume discusses environmental issues associated with deep-sea mining, with an emphasis on potential impacts, their consequences and the policy perspectives. The book describes the methods and technologies to assess, monitor and mitigate mining impacts on marine environments, and also suggests various approaches for environmental management when conducting deep-sea mining. The volume brings together information and data for researchers, contractors, mining companies, regulators, and NGOs working in the field of deep-sea mining. Section 1 highlights the various environmental issues and discusses methods and approaches that can help in developing environmentally sustainable deep-sea mining. Section 2 details the results and outcomes of studies related to impact assessment of deep-sea mining, and proposes methods for monitoring. Section 3 discusses the need and means for developing data standards and their application to deep-sea mining. Section 4 discusses the policies, approaches, and practices related to deep-sea mining, suggests formats for developing environmental impact statements (EIS) and environmental management plans (EMP), and describes national and international regulations for environmental management. Section 5 concludes the text by putting deep-sea economic activities into an environmental context and conducting techno-economic analyses of deep-sea mining and processing.

This volume provides a reference textbook and comprehensive compilation of multifaceted perspectives on the legal issues arising from the conservation and exploitation of non-human biological resources.

Contributors include leading academics, policy-makers and practitioners reviewing a range of socio-legal issues concerning the relationships between humankind and the natural world. The Routledge Handbook of Biodiversity and the Law includes chapters on fundamental and cutting-edge issues, including discussion of

major legal instruments such as the Convention on Biological Diversity and the Nagoya Protocol. The book is divided into six distinct parts based around the major objectives which have emerged from legal frameworks concerned with protecting biodiversity. Following introductory chapters, Part II examines issues relating to conservation and sustainable use of biodiversity, with Part III focusing on access and benefit-sharing. Part IV discusses legal issues associated with the protection of traditional knowledge, cultural heritage and indigenous human rights. Parts V and VI focus on a selection of intellectual property issues connected to the commercial exploitation of biological resources, and analyse ethical issues, including viewpoints from economic, ethnobotanical, pharmaceutical and other scientific industry perspectives.

This open access book discusses how the involvement of citizens into scientific endeavors is expected to contribute to solve the big challenges of our time, such as climate change and the loss of biodiversity, growing inequalities within and between societies, and the sustainability turn. The field of citizen science has been growing in recent decades. Many different stakeholders from scientists to citizens and from policy makers to environmental organisations have been involved in its practice. In addition, many scientists also study citizen science as a research approach and as a way for science and society to interact and collaborate. This book provides a representation of the practices as well as scientific and societal outcomes in different disciplines. It reflects the contribution of citizen science to societal development, education, or innovation and provides an overview of the field of actors as well as on tools and guidelines. It serves as an introduction for anyone who wants to get involved in and learn more about the science of citizen science.

Nitric Oxide in Plant Biology: An Ancient Molecule with Emerging Roles is an extensive volume which provides a broad and detailed overview of Nitric Oxide (NO) in plant biology. The book covers the entirety of the crucial role NO plays in the plant lifecycle, from the regulation of seed germination and growth to synthesis, nitrogen fixation and stress response. Beginning with NO production and NO homeostasis, **Nitric Oxide in Plant Biology** goes on to cover a variety of NO roles, with a focus on NO signalling, crosstalk and stress responses. Edited by leading experts in the field and featuring the latest research from laboratories from across the globe, it is a comprehensive resource of interest to students and researchers working in plant physiology, agriculture, biotechnology, and the pharmaceutical and food industries. Provides a broad and detailed overview on NO in plant biology, including NO production, NO signaling, NO homeostasis, crosstalk and stress responses Edited by leading experts in the field Features the latest research from laboratories from across the globe

**Routledge Handbook of Biodiversity and the Law
Science, Philosophy and Sustainability**

The Social and Environmental Dimension

Yearbook of International Organizations 2014-2015

13th International Conference, BIC-TA 2018, Beijing, China, November 2-4, 2018, Proceedings, Part II

A Generic Hyper Heuristic model using bio inspiration for solving combinatorial optimization problems

This book constitutes the refereed conference proceedings of the 12th International Conference on Bio-inspired Information and Communications Technologies, held in Shanghai, China, in July 2020. Due to the safety concerns and travel restrictions caused by COVID-19, BICT 2020 took place online in a live stream. BICT 2020 aims to provide a world-leading and multidisciplinary venue for researchers and practitioners in diverse disciplines that seek the understanding of key principles, processes and mechanisms in biological systems and leverage those understandings to develop novel information and communications technologies (ICT). The 20 full and 8 short papers were carefully reviewed and selected from 56 submissions. In addition to the main track targeting broad and mainstream research topics, BICT 2020 includes four special tracks with focused research topics on internet of everything, intelligent internet of things and network applications, intelligent sensor network, and data-driven intelligent modeling, application and optimization.

Co-founder and editor in chief of The Huffington Post Arianna Huffington shows how our cultural dismissal of sleep as time wasted compromises our health and our decision-making and undermines our work lives, our personal lives--and even our sex lives in this New York Times bestseller. We are in the midst of a sleep deprivation crisis, with profound consequences to our health, our job performance, our relationships and our happiness. What we need is nothing short of a sleep revolution: only by renewing our relationship with sleep can we take back control of our lives. In *The Sleep Revolution*, Arianna explores all the latest science on what exactly is going on while we sleep and dream. She takes on the sleeping pill industry, and all the ways our addiction to technology disrupts our sleep. She also offers a range of recommendations and tips from leading scientists on how we can get better and more restorative sleep, and harness its incredible power. The result is a sweeping, scientifically rigorous, and deeply personal exploration of sleep from all angles, from the history of sleep, to the role of dreams in our lives, to the consequences of sleep deprivation, and the new golden age of sleep science that reveals the vital role sleep plays in our every waking moment and every aspect of our health--from weight gain, diabetes, and heart disease to cancer and Alzheimer's. In today's fast-paced, always-connected, perpetually-harried and sleep-deprived world, our need for a good night's sleep is more important--and elusive--than ever. *The Sleep Revolution* both sounds the alarm on our worldwide sleep crisis and provides a detailed road map to the great sleep awakening that can help transform our lives, our communities, and our world.

This book is a sequel to 'Deep-Sea Mining: Resource Potential, Technical and Environmental Considerations' (2017) and 'Environmental Issues of Deep-Sea Mining: Impacts, Consequences and Policy Perspectives' (2019), and aims to provide a comprehensive volume on different perspectives of deep-sea mining from specialists around the world. The work is timely, as deep-sea minerals continue to enthrall researchers involved in activities such as ascertaining their potential as alternative sources for critical metals for green energy and other industrial applications, as well as technology development for their sustainable exploration and exploitation, while addressing environmental concerns. With a steady increase in the number of contractors having exclusive rights over large tracts of seafloor in the 'Area', i.e. area beyond national jurisdictions, the International Seabed Authority, mandated with

the responsibility of regulating such activities, is in the process of developing a code for exploitation of deep-sea minerals. These, coupled with growing interest among private entrepreneurs, investment companies and policy makers, underscore the need for updated information to be made available in one place on the subject of deep-sea mining. The book evaluates the potential and sustainability of mining for deep-sea minerals compared to other land-based deposits, the technologies needed for mining and processing of ores, the approach towards environmental monitoring and management, as well as the regulatory frameworks and legal challenges to manage deep-sea mining activities. The book is expected to serve as an important reference for all stakeholders including researchers, contractors, mining companies, regulators and NGOs involved in deep-sea mining.

The book focuses on original approaches intended to support the development of biologically inspired cognitive architectures. It bridges together different disciplines, from classical artificial intelligence to linguistics, from neuro- and social sciences to design and creativity, among others. The chapters, based on contributions presented at the Eleventh Annual Meeting of the BICA Society, held on November 10-14, 2020, in Natal, Brazil, discuss emerging methods, theories and ideas towards the realization of general-purpose humanlike artificial intelligence or fostering a better understanding of the ways the human mind works. All in all, the book provides engineers, mathematicians, psychologists, computer scientists and other experts with a timely snapshot of recent research and a source of inspiration for future developments in the broadly intended areas of artificial intelligence and biological inspiration.

World Ocean Assessment

The Biopolitics of Embryos and Alphabets

The Selection Process of Biomass Materials for the Production of Bio-Fuels and Co-firing

Molecular and Cellular Plant Reproduction

Wireless Sensor Networks

Perspectives on how to get there for regions with too much and too little nitrogen

Thin on the Ground: Neandertal Biology, Archeology and Ecology synthesizes the current knowledge about our sister species the Neandertals, combining data from a variety of disciplines to reach a cohesive theory behind Neandertal low population densities and relatively low rate of technological innovation. The book highlights and contrasts the differences between Neandertals and early modern humans and explores the morphological, physiological, and behavioral adaptive solutions which led to the extinction of the Neandertals and the population expansion of modern humans. Written by a world recognized expert in physical anthropology, Thin on the Ground: Neandertal Biology, Archaeology and Ecology will be a must have title for anyone interested in the rise and fall of the Neandertals.

Providing both an international organizations and research bibliography, Volume 4 cites over 46,000 publications and information resources supplied by international organizations, and provides nearly 18,000 research citations under 40 subject headings. This volume also includes a research bibliography on international organizations and transnational associations.

World Ocean Assessment Cambridge University Press Genomics in Aquaculture to Better Understand Species Biology and Accelerate Genetic Progress Frontiers Media SA

This carefully edited book takes a walk through recent advances in adaptation and hybridization in the Computational Intelligence (CI) domain. It consists of ten chapters that are divided into three parts. The first part illustrates background information and provides some theoretical foundation tackling the CI domain, the second part deals with the adaptation in CI algorithms, while the third part focuses on the hybridization in CI. This book can serve as an ideal reference for researchers and students of computer science, electrical and civil engineering, economy, and natural sciences that are confronted with solving the optimization, modeling and simulation problems. It covers the recent advances in CI that encompass Nature-inspired algorithms, like Artificial Neural networks, Evolutionary Algorithms and Swarm Intelligence -based algorithms.

How The World Sees Us: World News, Alternative Views, Commentary on U.S. Foreign Relations

The Railway Times ...

12th EAI International Conference, BICT 2020, Shanghai, China, July 7-8, 2020, Proceedings

Nitric Oxide in Plant Biology

Transforming Your Life, One Night at a Time

Proceedings of the 11th Annual Meeting of the BICA Society

In recent times, the phrase 'personalised medicine' has become the symbol of medical progress and a label for better health care in the future. However, a controversial debate has developed around whether these promises of better, more personal and more cost-efficient medicine are realistic. This book brings together leading researchers from across Europe and North America, from both normative and empirical

disciplines, who take a more critical view of the often encountered hype associated with personalised medicine. Partially drawing on a four year collaborative research project funded by the German Ministry for Education and Research, the book presents a multidisciplinary debate on the current state of research on the ethical, legal and social implications of personalised medicine. At a time when future health care is a topic of much discussion, this book provides valuable policy recommendations for the way forward. This study will be of interest to researchers from various disciplines including philosophy, bioethics, law and social sciences.

This Special Issue focuses on all aspects of the recent research and development related to fiber optic sensors. The recent advances in fiber-based sensing technologies have enabled both fundamental studies and a wide spectrum of applications. The goal of this Special Issue is to bring attention to the most recent results in the field of fiber optic sensors, including new mechanisms, materials, processes, and applications.

From a global perspective aquaculture is an activity related to food production with large potential for growth. Considering a continuously growing population, the efficiency and sustainability of this activity will be crucial to meet the needs of protein for human consumption in the near future. However, for continuous enhancement of the culture of both fish and shellfish there are still challenges to overcome, mostly related to the biology of the cultured species and their interaction with (increasingly changing) environmental factors. Examples of these challenges include early sexual maturation, feed meal replacement, immune response to infectious diseases and parasites, and temperature and salinity tolerance. Moreover, it is estimated that less than 10% of the total aquaculture production in the world is based on populations genetically improved by means of artificial selection. Thus, there is considerable room for implementing breeding schemes aimed at improving productive traits having significant economic impact. By far the most economically relevant trait is growth rate, which can be efficiently improved by conventional genetic selection (i.e. based on breeding values of selection candidates). However, there are other important traits that cannot be measured directly on selection candidates, such as resistance against infectious and parasitic agents and carcass quality traits (e.g. fillet yield and meat color). However, these traits can be more efficiently improved using molecular tools to assist breeding programs by means of marker-assisted selection, using a few markers explaining a high proportion of the trait variation, or genomic selection, using thousands of markers to estimate genomic

breeding values. The development and implementation of new technologies applied to molecular biology and genomics, such as next-generation sequencing methods and high-throughput genotyping platforms, are allowing the rapid increase of availability of genomic resources in aquaculture species. These resources will provide powerful tools to the research community and will aid in the determination of the genetic factors involved in several biological aspects of aquaculture species. In this regard, it is important to establish discussion in terms of which strategies will be more efficient to solve the primary challenges that are affecting aquaculture systems around the world. The main objective of this Research Topic is to provide a forum to communicate recent research and implementation strategies in the use of genomics in aquaculture species with emphasis on (1) a better understanding of fish and shellfish biological processes having considerable impact on aquaculture systems; and (2) the efficient incorporation of molecular information into breeding programs to accelerate genetic progress of economically relevant traits.

By means of this 'Frontiers in Genetics' research topic, we are celebrating 30 years of the Comet Assay. The first paper on this single-cell gel electrophoresis assay was published in 1984 by O. Ostling and K.J. Johanson (Biochem. Biophys. Res. Commun. Vol.123: 291-298). The comet assay is a versatile and sensitive method for measuring single - and double-strand breaks in DNA. By including lesion-specific enzymes in the assay, its range and sensitivity are greatly increased, but it is important to bear in mind that their specificity is not absolute. The comet assay (with and without inclusion of lesion-specific enzymes) is widely used as a biomarker assay in human population studies - primarily to measure DNA damage, but increasingly also to assess the capacity of cells for DNA repair. Ostling and Johanson (Biochem. Biophys. Res. Commun., 1984) were also the first to report experiments to measure DNA repair, by simply following the decrease of DNA damage over time after challenging cells with ionising radiation. However, this approach is time-consuming and laborious as it requires an extended period of cell culture and is therefore not ideal for biomonitoring studies, which typically require high-throughput processing of many samples. As an alternative approach, the in vitro comet-based repair assay was developed: a cell extract is incubated with a DNA substrate containing specific lesions, and DNA incisions accumulate. The in vitro comet-based repair assay has been modified and improved over the past decade: it was first devised to measure base excision repair of oxidised purines in lymphocytes (Collins et al., Mutagenesis, 2001), but has since been adapted for other lesions and thus other repair

pathways, as well as being applied to tissue samples in addition to cell suspensions. Even after 30 years, the comet assay is still in a growth phase, with many new users each year. Many questions are repeatedly raised, which may seem to have self-evident answers, but clearly, it is necessary to reiterate them for the benefit of the new audience, and sometimes being forced to think again about old topics can shed new light. Different applications of the comet assay are discussed in this special issue, including: genotoxicity testing in different organisms, human biomonitoring, DNA repair studies, environmental biomonitoring and clinical studies. Furthermore, we consider and where possible answer questions, including the ones raised by Raymond Tice at the 8th International Comet Assay Workshop in Perugia (Italy 2009): What is the spectrum of DNA damage detected by the various versions of the comet assay?; What are the limitations associated with each application?; What should be done to standardize the assay for biomonitoring studies?; Can the comet assay be used to monitor changes in global methylation status?; What cell types are suitable for detecting genotoxic substances and their effects in vivo and in vitro?; Can the assay be fully automated?; and more. So this 'Frontiers in Genetics' research topic is written for the beginner as well as for the experienced users of the comet assay.

Report of the Chief of Engineers U.S. Army

Sustainability, Technology, Environmental Policy and Management

Just Enough Nitrogen

International Organization Bibliography and Resources

30 years of the Comet Assay: an overview with some new insights

Orchid Genomics and Developmental Biology

This two-volume set (CCIS 951 and CCIS 952) constitutes the proceedings of the 13th International Conference on Bio-inspired Computing: Theories and Applications, BIC-TA 2018, held in Beijing, China, in November 2018. The 88 full papers presented in both volumes were selected from 206 submissions. The papers deal with studies abstracting computing ideas such as data structures, operations with data, ways to control operations, computing models from living phenomena or biological systems such as evolution, cells, neural networks, immune systems, swarm intelligence. The deep ocean is the planet's largest biome and holds a wealth of potential natural assets. This book gives a comprehensive account of its geological and physical processes, ecology and biology, exploitation, management, and conservation.

Published to coincide with the Fourth United Nations Environmental Assembly, UN Environment's sixth Global

Environment Outlook calls on decision makers to take bold and urgent action to address pressing environmental issues in order to protect the planet and human health. By bringing together hundreds of scientists, peer reviewers and collaborating institutions and partners, the GEO reports build on sound scientific knowledge to provide governments, local authorities, businesses and individual citizens with the information needed to guide societies to a truly sustainable world by 2050. GEO-6 outlines the current state of the environment, illustrates possible future environmental trends and analyses the effectiveness of policies. This flagship report shows how governments can put us on the path to a truly sustainable future - emphasising that urgent and inclusive action is needed to achieve a healthy planet with healthy people. This title is also available as Open Access on Cambridge Core.

This book focuses on the principles of wireless sensor networks (WSNs), their applications, and their analysis tools, with meticulous attention paid to definitions and terminology. This book presents the adopted technologies and their manufacturers in detail, making WSNs tangible for the reader. In introductory computer networking books, chapter sequencing follows the bottom-up or top-down architecture of the 7-layer protocol. This book addresses subsequent steps in this process, both horizontally and vertically, thus fostering a clearer and deeper understanding through chapters that elaborate on WSN concepts and issues. With such depth, this book is intended for a wide audience; it is meant to be a helper and motivator for senior undergraduates, postgraduates, researchers, and practitioners. It lays out important concepts and WSN-related applications; uses appropriate literature to back research and practical issues; and focuses on new trends. Senior undergraduate students can use it to familiarize themselves with conceptual foundations and practical project implementations. For graduate students and researchers, test beds and simulators provide vital insights into analysis methods and tools for WSNs. Lastly, in addition to applications and deployment, practitioners will be able to learn more about WSN manufacturers and components within several platforms and test beds.

Impacts, Consequences and Policy Perspectives

Fiber Optic Sensors and Applications

Genomics in Aquaculture to Better Understand Species Biology and Accelerate Genetic Progress

The Science of Citizen Science

UNCONSCIONABLE

Thin on the Ground

A functional discussion of the crop selection process for biomass energy The Selection Process of Biomass Materials for the Production of Bio-fuels and Co-firing provides a detailed examination and analysis for a number of energy crops and their use as a source for generating electricity and for the production of bio-fuels. Renowned renewable energy expert and consultant Dr. Najib Altawell begins with the fundamentals of bio-fuels and co-firing and moves on to the main feature, which is the methodology that assists energy scientists and engineers to arrive at the most suitable biomass materials

tailored to each company's business and economic environments and objectives. This methodology provides a framework whereby power-generating companies can insert their own values for each factor, whether business factor (BF) or scientific & technical factors (S&T) or both simultaneously. The methodology provides a list of factors related to the biomass energy business. The average values have been obtained from the survey method and laboratory tests. These values are the standard values power companies can use if they need or wish to use them. The Selection Process of Biomass Materials for the Production of Bio-fuels and Co-firing has been designed and compiled for the widest possible range of readers, researchers, businesspeople, and economists who are connected to the renewable energy field in general, and biomass energy in particular. Because of its focus on practical data and applications, the book is also accessible for general readers who may or may not have a technical or scientific background.

During Latin America's China-led commodity boom, governments turned a blind eye to the inherent flaws in the region's economic policy. Now that the commodity boom is coming to an end, those flaws cannot be ignored. High on the list of shortcomings is the fact that Latin American governments—and Chinese investors—largely fell short of mitigating the social and environmental impacts of commodity-led growth. The recent commodity boom exacerbated pressure on the region's waterways and forests, accentuating threats to human health, biodiversity, global climate change and local livelihoods. China and Sustainable Development in Latin America documents the social and environmental impact of the China-led commodity boom in the region. It also highlights important areas of innovation, like Chile's solar energy sector, in which governments, communities and investors worked together to harness the commodity boom for the benefit of the people and the planet.

For science to remain a legitimate and trustworthy source of knowledge, society will have to engage in the collective processes of knowledge co-production, which not only includes science, but also other types of knowledge. This process of change has to include a new commitment to knowledge creation and transmission and its role in a plural society. This book proposes to consider new ways in which science can be used to sustain our planet and enrich our lives. It helps to release and reactivate social responsibility within contemporary science and technology. It reviews critically relevant cases of contemporary scientific practice within the Cartesian paradigm, relabelled as 'innovation research', promoted as essential for the progress and well-being of humanity, and characterised by high capital investment, centralised control of funding and quality, exclusive expertise, and a reductionism that is philosophical as well as methodological. This is an accessible and relevant book for scholars in Science and Technology Studies, History and Philosophy of Science, and Science, Engineering and Technology Ethics. Providing an array of concrete examples, it supports scientists, engineers and technical experts, as well as policy-makers and other non-technical professionals working with science and technology to re-direct their approach to global problems, in a more integrative, self-reflective and humble direction.

"UNCONSCIONABLE" by Dr. Carolyn LaDelle Bennett is a Patriot's View as Others See. The book shines light on the wrongheaded and immoral nature of US foreign relations policy and practice. Published by Xlibris and released at Rochester, N.Y. (PRWEB) August 29, 2014: "Acts committed by and/or in the name of one's homeland must be of concern to inhabitants of that land — it is their duty to be concerned and engaged," Dr. Carolyn LaDelle Bennett says in expressing the

relevance of her work. "UNCONSCIONABLE" lays out a view of what is and what should be, what is wrong and what is better. In six map-illustrated chapters, this work of nonfiction documents U.S. foreign relations as global, unprovoked and unchecked violence. As it is also a hope for change, the work not only comments on significance and repercussions of the current state of affairs, it offers corrective measures. As the work of a veteran educator, its ending sections further instruct with reference tools of extensive sources and notes, appendices and index covering contributors and background material, international principles and conventions; and components of the great body to which the book is dedicated, the 193-member-states United Nations. Dr. Bennett takes a world view as articulated by others in independent, alternative print and broadcast sources, offering especially American readers an unfiltered, oft unseen perspective on how the rest of the world sees U.S. relations with the world's peoples. The hope Bennett ventures is that "if we (Americans) see ourselves as others see us, we will be moved to change our ways for the better." "UNCONSCIONABLE" By Dr. Carolyn LaDelle Bennett Hardcover | 6 x 9in | 306 pages | ISBN 9781499043143 Softcover | 6 x 9in | 306 pages | ISBN 9781499043150 E-Book | 306 pages | ISBN 9781499043136 Available at Amazon and Barnes & Noble About the Author Dr. Carolyn L. Bennett is credentialed in education and print journalism and public affairs. A lifelong American writer and writer/activist, her work concerns itself with news and current affairs, historical contexts and ideas particularly related to acts and consequences of US foreign relations; matters of geopolitics, human rights, war and peace, violence and nonviolence. PRWeb Home: <http://www.prweb.com/releases/2014/08UNCONSCIONABLE/prweb12131656.htm>

Bio-Inspired Robotics

Perspectives on Deep-Sea Mining

Natural Capital and Exploitation of the Deep Ocean

The Ethics of Personalised Medicine

Adaptation and Hybridization in Computational Intelligence

Brain-Inspired Cognitive Architectures for Artificial Intelligence: BICA*AI 2020

Includes the Report of the Mississippi River Commission, 1881-19 .

This book highlights the latest research on practical applications of computational biology and bioinformatics, and addresses emerging experimental and sequencing techniques that are posing new challenges for bioinformatics and computational biology. Successfully applying these techniques calls for new algorithms and approaches from fields such as statistics, data mining, machine learning, optimization, computer science, and artificial intelligence. In response to these challenges, we have seen the rise of a new generation of interdisciplinary scientists with a strong background in the biological and computational sciences. These proceedings include 21 papers covering many different subfields of bioinformatics and computational biology. Focusing on interdisciplinary applications that combine e.g. bioinformatics, chemoinformatics, and system biology, they are intended to promote the collaboration of scientists from different research groups and with

different backgrounds (computer scientists, mathematicians, biologists) to reach breakthrough solutions and overcome the challenges outlined above.

This volume provides a unique collection of contributions addressing both the 'too much' and 'too little' sides of the nitrogen story. Building on analyses started at the 6th International Nitrogen Conference, Kampala, the book explores the idea of 'just enough nitrogen': sufficient for sustainable food production, but not so much as to lead to unsustainable pollution and climate problems. The range of nitrogen threats examined, solutions evaluated and science-policy analyses presented here has provided the foundation to agree the 'Kampala Statement-for-Action on Nitrogen in Africa and Globally,' as reported in this volume. Humanity today faces unprecedented challenges: How to feed a growing population? How to reduce air pollution, water pollution and climate change? How to handle regional differences in an era of increasing globalization? These questions are at the heart of this edited volume which examines the multi-dimensional nature of the global nitrogen challenge. While humans have massively altered the nitrogen cycle, the consequences have become polarized. Some regions have too much nitrogen, associated with pollution and wasteful use of a valuable resource, while other regions have too little nitrogen, leading to constraints on food production and depletion of soil nutrient stocks. The volume provides a unique collection of contributions addressing both the 'too much' and 'too little' sides of the nitrogen story. Building on analyses started at the 6th International Nitrogen Conference, Kampala, the book explores the idea of 'just enough nitrogen': sufficient for sustainable food production, but not so much as to lead to unsustainable pollution and climate problems. The range of nitrogen threats examined, solutions evaluated and science-policy analyses presented here has provided the foundation to agree the 'Kampala Statement-for-Action on Nitrogen in Africa and Globally,' as reported in this volume. Together, the contributions in this book are now informing actions by the International Nitrogen Initiative (INI) in working with the United Nations Environment Programme and others to establish the International Nitrogen Management System (INMS). A key outcome has been to catalyse development of the first Resolution on Sustainable Nitrogen Management, as adopted by the fourth UN Environment Assembly (UNEA/EA.4/Res.14). The work is written for researchers and policy makers and all those interested in seeing how sustainable nitrogen management can contribute to meeting many of the UN Sustainable Development Goals.

Plant reproduction is essential not only for producing offspring but also for increasing crop quality and yield. Moreover, plant reproduction entails complex growth and developmental processes, which provide a variety of opportunities for elucidating fundamental principles in biology. The combinational employment of molecular

genetic approaches and emerging technologies, such as fluorescence-based imaging techniques and next generation sequencing, has led to important progresses in plant reproduction using model plants, crops, and trees. This e-book compiles 31 articles, including 1 hypothesis and theory, 4 perspectives, 12 reviews, and 14 original research papers. We hope that this E-book will draw attention of all plant biologists to exciting advances in the field of plant reproduction and help solve remaining challenging questions in the future. We wish to express our appreciation to all the authors, reviewers, and the Frontiers editorial office for their excellent contributions that made the publication of this e-book possible.

Environmental Issues of Deep-Sea Mining

Data Integration in the Life Sciences

China and Sustainable Development in Latin America

Bio-inspired Computing: Theories and Applications

The Social Footprints of Global Trade

Bio-inspired Information and Communication Technologies

This book is a printed edition of the Special Issue "Bio-Inspired Robotics" that was published in Applied Sciences

This best-selling comprehensive book conveys the relevance of sociology by presenting a timely collection of theories, research, and examples -- including its signature first-person accounts that open many chapters. These lived experiences are relevant to students and introduce themes that provide a framework for learning the chapter material. Kendall's vivid and inviting writing style, emphasis on applications, and eye for compelling current examples further highlight sociology's relevance to all students. Now in its eleventh edition, *SOCIOLOGY IN OUR TIMES* is acclaimed for being the first textbook to integrate race, class, and gender issues, and for its thorough presentation of sociological theory, including contemporary perspectives such as feminism and postmodernism. This edition focuses more on social/global change and on the contemporary world, presenting such current debates as bullying and social media abuse, digital-age methods to increase school attendance, food trucks and the spread of culture, modern slavery, and weight bias.

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This book constitutes revised selected papers from the 13th International Conference on Data Integration in the Life Sciences, DILS 2018, held in Hannover, Germany, in November 2018. The 5 full, 8 short, 3 poster and 4 demo papers presented in this volume were carefully reviewed and selected from 22 submissions. The papers are organized in topical sections named: big biomedical data integration and management; data exploration in the life sciences; biomedical data analytics; and big biomedical applications.

Concepts, Applications, Experimentation and Analysis

Biology-Inspired Engineering and Engineering-Inspired Biology

Integrative Genomics and Network Biology in Livestock and other Domestic Animals

The Sleep Revolution

Critical Perspectives