Environmental Sciences

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Soil Science

The soils are fundamental to our existence, delivering water and nutrients to plants, that feed us. But they are in many ways in danger and their conservation is therefore a most important focus for science, governments and society as a whole. A team of world recognised researchers have prepared this first English edition based on the 16th European edition.

Features

- Based on the standard textbook on Soil Science for over 30 years in Europe now available in English and improved and adjusted for the North American and International Market.
- Contents enriched by more than 250 (100 color) illustrations and dozens of tables and useful charts.
- Constitutes and unparalleled breadth of authoritative and class-tested material to serve as a primary textbook, supplementary reader and source of enrichment topics.

Fields of interest

- Soil Science & Conservation; Geochemistry; Physical Geography

Target groups

- Research

Discount group

- Professional Non-Medical

Due January 2014

Hardcover
- approx. $89.95
ISBN 978-3-642-30941-0

Due February 2014

2014. Approx. 50 p. 17 illus., 13 in color.
(SpringerBriefs in Environment, Security, Development and Peace, 5) Softcover
- approx. $49.95
ISBN 978-3-642-29236-1

M. Gophen, MIGAL Galilee Technological Center, Kiryat Shmona, Israel

Long Term Processes in Lake Kinneret

Physical Parameters, Nutrients, Phytoplankton, Zooplankton and Fish Communities

The book's subject is an ecological insight into a natural limnological ecosystem that was partly affected by anthropogenic operations and also by natural changes whilst having a critical impact on the national drinking water supply in Israel. The impact of the anthropogenic and natural parameters on the ecosystem are significant for the sustainability of the ecosystem. The different chapters are giving a scientific-descriptive information and analyses on limnological processes and their impact on water quality. The chapters cover topics of hydrology and eco-hydrology, limnology, plankton and fish freshwater ecology with conclusions on lake management.

Feature

- The book deals with long-term limnological processes

Fields of interest

- Marine & Freshwater Sciences; Hydrogeology

Target groups

- Research

Discount group

- Professional Non-Medical

Due January 2014

2012. Approx. 300 p. (Environmental Science and Engineering / Environmental Science) Hardcover
- approx. $159.00
ISBN 978-3-540-88251-0
T. T. Hai, Hanoi University of Mining and Geology, Hanoi, Vietnam (Ed)

**Geology and Water Resources of Karstic Regions of Vietnam**

Karst terranes are among the most unique geological features and comprise a significant portion of the territory of Vietnam. These areas have provided extensive geological and archeological evidence of the evolution of life on Earth, and host natural resources and exotic lands upon which a large human population depends. Most of the UNESCO-recognized natural heritages and geoparks of Vietnam are in karstic regions. These settings are also considered among the most vulnerable in the world to natural and/or man-induced hazards.

**Features**
- This is the first book on the geology and water resources of karst areas in Vietnam: it can be used by both university students and professionals as a major source of reference and learning material for students and professionals interested in Vietnam in the years to come.
- The extensive illustrations, including nearly one hundred color photos and diagrams, are both informative and attractive.
- The book will be a recognized reference resource for international specialists, as it will be published by Springer.

**Contents**
- Socio-geography of the karstic regions of Vietnam.
- Geographical features of the karstic rocks in Vietnam.
- Geomorphological features of karstic regions of Vietnam.
- Hydrological features of karstic regions of Vietnam.
- Exploitation, usage and protection of water resources in karstic areas of Vietnam.

**Fields of interest**
- Environment, general; Hydrology/Water Resources

**Target groups**
- Research

**Discount group**
- Professional Non-Medical

**New Series**

**Science for Sustainable Societies**

Editor-in-chief: K. Takeuchi

This series aims to provide timely coverage of results of research conducted in accordance with the principles of sustainability science to address impediments to achieving sustainable societies – that is, societies that are low carbon emitters, that live in harmony with nature, and that promote the recycling and re-use of natural resources. Books in the series also address innovative means of advancing sustainability science itself in the development of both research and education models. The overall goal of the series is to contribute to the development of sustainability science and to its promotion at research institutions worldwide, with a view to furthering knowledge and overcoming the limitations of traditional discipline-based research to address complex problems that afflict humanity and now seem intractable. Books published in this series will be solicited from scholars working across academic disciplines to address challenges to sustainable development in all areas of human endeavors. This is an official book series of the Integrated Research System for Sustainability Science (IR3S) of the University of Tokyo.

**Beyond the Limits to Growth**

**New Ideas for Sustainability from Japan**

At a time when contemporary challenges seem to many to be insurmountable, this book offers an optimistic view of the future and provides a road map for societies to get there. Drawing upon extensive research and many years as a thought leader in environmental and sustainability issues in Japan and internationally, Hiroshi Komiyama analyzes the most pressing challenges to the attainment of sustainability of economically advanced nations and argues forcefully for Japan to lead them out of the present dilemma through active promotion of creative consumer and societal demand.

**Features**
- Provides fresh insights to the challenges of and pathways to sustainable societies
- Includes a chapter on the realistic development of “platinum societies” that will serve as models for the future.
- Shows how new consumer demand for quality will determine the development of new sustainable technologies in both developed and developing countries.

**Contents**
1 “Diffusive Demand” and “Creative Demand”.
2 The 21st Century Paradigm and the Role of Information Technology.
3 “Vision 2050” as the Rescue of a “Limited Earth”.
4 Finding a Way Out Through Creative Demand, I.
5 Finding a Way Out Through Creative Demand, II.
6 Toward the Realization of a “Platinum Society”.

**Fields of interest**
- Sustainable Development; Energy Policy, Economics and Management; Energy Efficiency (incl. Buildings)

**Target groups**
- Professional/practitioner

**Discount group**
- Professional Non-Medical

**Due January 2014**


2014. XV, 135 p. 30 illus. in color. (Science for Sustainable Societies) Hardcover
► approx. $59.95
ISBN 978-4-431-54558-3
Rethinking Food Systems: Structural Challenges, New Strategies and the Law

Contents
Introduction: In Search of Better Options: Food Sovereignty, the Right to Food and Legal Tools for Transforming Food Systems.


Fields of interest
Sustainable Development; Human Rights; Social Structure, Social Inequality

Target groups
Graduate

Discount group
Professional Non-Medical

Due December 2013
► $129.00
ISBN 978-94-007-7777-4

Pollutant Diseases, Remediation and Recycling

Pollution has no borders. This popular 70's saying from early ecologists is surprisingly still true nowadays despite overwhelming scientific evidence and public awareness of the occurrence of artificial toxic substances in water, food, air, living organisms and the environment.

Features
- Features chapters on artificial toxic substances in the environment.
- In particular includes readings on indoor air pollution and health related issues.
- Looks at pollutants from industrial wastewater from, amongst others, textile and petrochemical plants.
- Explains how fly ash can be recycled in for instance agriculture and includes techniques to remediate carcinogenic nitrosamines.

Contents
1. School air quality: pollutants, monitoring and toxicity.
2. Organic contaminants from industrial wastewaters: identification, toxicity and fate in the environment.
3. Fly ash pollutants, treatment and recycling.
4. Organotin compounds from snails to humans.
5. Surfactants: chemistry, toxicity and remediation.
6. Cadmium, lead, thallium: occurrence, neurotoxicity and histopathological changes of the nervous system.
8. Plants as monitors of lead air pollution.
10. Dioxins and furans: sources, impacts and remediation.

Fields of interest
Environmental Chemistry; Waste Water Technology / Water Pollution Control / Water Management / Aquatic Pollution; Ecotoxicology

Target groups
Research

Discount group
Professional Non-Medical

Due January 2014
► approx. $179.00
ISBN 978-3-319-02386-1

Assessment of Carbon Footprint in Different Industrial Sectors, Volume 1

Carbon footprint is one of the important environmental impacts, which has received greater attention from the public, government and media.

Features
- First dedicated book pertaining to carbon labeling and Carbon Footprint of various products.
- Highlights PCF from eight different industrial sectors.
- Highlights the impacts and mitigation of carbon footprint in different industrial sectors.

Contents
Introduction to the eco-design methodology and the role of Product Carbon Footprint.
- Carbon footprint estimation of agriculture sector.
- Carbon Footprint of Food Products.
- The carbon footprint of ceramic products.
- Carbon footprint of mobile devices.
- The carbon footprint of pigweed in Flanders.
- Carbon emission and carbon footprint of different industrial spaces in different regions of China.
- Ecodesign and Product Carbon Footprint use in the packaging sector.
- Carbon Footprint of Crop Production and the Significance for GHGs Reduction in Agriculture Sector of China.
- Carbon footprint of solid waste sector in Greater Bangalore, India.

Fields of interest
Environmental Management; Production/Logistics/Supply Chain Management; Industrial and Production Engineering

Target groups
Professional/practitioner

Discount group
Professional Non-Medical

Due October 2013
2014. IX, 534 p. 89 illus., 74 in color. (EcoProduction) Hardcover
► $129.00
### Expanding Peace Ecology: Peace, Security, Sustainability, Equity and Gender

**Perspectives of IPRA’s Ecology and Peace Commission**

This book has peer-reviewed chapters by scholars from Australia, Canada, Germany, Japan, Mexico, and the USA that were presented to the Ecology and Peace Commission (EPC) of the International Peace Research Association (IPRA) in November 2012 in Japan.

**Features**
- Addresses linkages between sustainability, transition and sustainable peace
- Focuses on peace, environmental education, community-based ecological restoration and ability expectation
- Underlines the need to combat trafficking of women and children by transnational crime rings in Nigeria, a national security threat

**Fields of interest**
- Environmental Law/Policy/Ecojustice; Sustainable Development; Social Work

**Target groups**
- Research

**Discount group**
- Professional Non-Medical

#### Decision Support for Environmental Management

**Applications of the Ecosystem Management Decision Support System**

Since 1997, the Ecosystem Management Decision Support (EMDS) system has been used around the world to support environmental analysis and planning in many different application areas, and it has been applied over a wide range of geographic scales, from forest stands to entire countries. An extensive sampling of this diversity of applications is presented in section 2, in which EMDS application developers describe the varied uses of the system. These accounts, together with the requisite background in section 1, provide valuable practical insights into how the system can be applied in the general domain of environmental management.

**Feature**
- Readers can expect to gain valuable insights into how the system can be applied in their specific problem domains

**Fields of interest**
- Environmental Management; Nature Conservation

**Target groups**
- Professional/practitioner

**Discount group**
- Professional Non-Medical

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**Due November 2013**

- $54.99
- ISBN 978-3-319-00728-1

**Due December 2013**

2014. Approx. 300 p. (Environmental Science and Engineering / Environmental Science) Hardcover
- approx. $159.00
- ISBN 978-3-642-31999-0

**Due December 2013**

- approx. $139.00

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**The Soils of Bulgaria**

The Soils of Bulgaria offers a comprehensive analysis of the characteristics of soils and concepts on their magnitude. The purpose of the book is to introduce readers to the soil problematic and ecology in Bulgaria. The volume is divided into 3 parts. The first includes historical facts on soil research in Bulgaria, as well as general conditions and factors of soil formation, while the second applies an original pedological approach. The book’s third part focuses on essential information concerning land use/cover in Bulgaria. Each of the 13 chapters deals more specifically with fundamental chemical and physical soil properties, concepts of soil evolution, old and modern processes, geographic distribution, climatic conditions, topography, parent materials, plant associations, morphology, and the relationship with different classification systems. The interactions between soil status and management are also highlighted. The use of the latest, statistically significant data ensures precise conclusions. The book also includes a large number of charts and new illustrations. The Soils of Bulgaria is crucial reading material for anyone interested in soil management and agriculture in Easter Europe, from students to policy makers and is also of particular interest for researchers in the field.

**Features**
- Focuses on the soils of Bulgaria
- Discusses past and present land use in relation to landscape
- Presents case studies, describing soil genesis and management issues
- Contains high quality photographs, graphics and maps

**Fields of interest**
- Soil Science & Conservation; Physical Geography; Agriculture

**Target groups**
- Research

**Discount group**
- Professional Non-Medical

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**The Soils of Bulgaria**

T. Shishkov, Institute of Soil Science, Sofia, Bulgaria; N. Kolev, Agricultural Academy, Sofia, Bulgaria

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U. Oswald Spring, National Autonomous University of Mexico (UNAM), Cuernavaca, Mexico; H. G. Brauch, AFES-PRESS, AG Friedensforschung und Europäische Sicherheitspolitik, Mosbach, Germany; K. Tidball, Cornell University, Ithaca, NY, USA (Eds)
Sustainable Development of Biofuels in Latin America and the Caribbean

This book examines recent developments in Latin American biofuel production. Taking “sustainable development” as a central theme, each chapter considers one country in the region and explores how biofuel production is evolving given concerns about food sovereignty, trade and other social issues. Environmental conservation, as well as an increasingly complex and globalized economic structure, is also taken into account. The contributions to this volume critically explore the ways in which biofuel production in Latin America impact social, economic and environmental systems: the so-called “three pillars of sustainability”.

Features
- Explores the ways in which biofuel production in Latin America impacts the three pillars of sustainability
- Examines biofuel production in Brazil, Argentina, Colombia, Mexico, Central America and the Caribbean region
- Most chapters consider one country in a given region and explore how biofuel production is evolving given concerns about various factors

Contents
Introduction.
- International Sustainability Standards and Certification.
- Brazil: Ethanol.
- Brazil: Biodiesel.
- Argentina.
- Peru.
- Colombia.
- Guatemala.
- Mexico.
- The Caribbean.
- Conclusions.
- Index.

Fields of interest
Sustainable Development; Renewable and Green Energy; Energy Policy, Economics and Management

Target groups
Research

Discount group
Professional Non-Medical

Due November 2013
2014. I, 416 p. 46 illus., 33 in color. Hardcover
$129.00
ISBN 978-1-4614-9274-0

Weather Matters for Energy

Contents
Part I: Why Should the Energy Industry be Concerned About Weather Patterns?.
- A new era for Energy.
- Renewable Energy and Climate Change Mitigation – an Overview of the IPCC Special Report.
- Part II: How is the Energy Industry Meteorology-proofing Itself?.
- Combining Meteorological and Electrical Engineering Expertise to Solve Energy Management Problems.
- Weather and Climate Impacts on Australia’s National Electricity Market.
- Bioenergy, Weather and Climate Change in Africa: Leading Issues and Policy Options.
- Part III: What can Meteorology offer to the Energy Industry?.
- Weather and climate information delivery within national and international frameworks.
- Meteorology and the energy sector.
- Earth observations in support of the Energy sector.
- Current status and challenges in wind energy assessment.
- Wind Power Forecasting.
- Regional Climate Modelling for the Energy Sector.
- In Search of the Best Possible Weather Forecast for the Energy Industry.
- Part IV: How is the Energy Industry applying State-of-the-Science Meteorology?.
- A probabilistic view of weather, climate and the energy industry. [...]