Springer
Life & Earth Sciences Preview
Top Frontlist April – June 2014

• Earth Sciences
• Environment
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Ria Frauenfeld
Product Manager, Trade Marketing

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Contaminant Geochemistry

Interactions and Transport in the Subsurface Environment

In this updated and expanded second edition, new literature has been added on contaminant fate in the soil-subsurface environment. In particular, more data on the behavior of inorganic contaminants and on engineered nanomaterials were included, the latter comprising a group of “emerging contaminants” that may reach the soil and subsurface zones. New chapters are devoted to a new perspective of contaminant geochemistry, namely irreversible changes in pristine land and subsurface systems following chemical contamination. Two chapters were added on this topic, focusing attention on the impact of chemical contaminants on the matrix and properties of both liquid and solid phases of soil and subsurface domains.

Due May 2014
Monograph
2nd ed. 2014. Approx. 400 p. Hardcover
► $179.00
ISBN 978-3-642-54776-8

The Atmosphere and Ionosphere

Elementary Processes, Monitoring, and Ball Lightning

Due May 2014
Monograph
2014. XVI, 436 p. 135 illus., 85 in color. (Physics of Earth and Space Environments) Hardcover
► $179.00
ISBN 978-3-319-05238-0

Monitoring Volcanoes in the North Pacific
Observations from Space

Due February 2014
Monograph
► $199.00
ISBN 978-3-540-24125-6

Ozone in the Atmosphere

This book offers a concise yet thorough overview of established scientific knowledge about ozone in the atmosphere, presenting both ozone changes and trends in the stratosphere, as well as the effects of overabundance in the troposphere including photosmog.

Due March 2014
Monograph
2014. VIII, 137 p. 52 illus., 29 in color. Hardcover
► $129.00
ISBN 978-3-642-54098-1

Understanding an Orogenic Belt

Structural Evolution of the Himalaya

The book provides a model for structural evolution of the Himalaya with relevant background information so that earth scientists of other specialization will find it easy to comprehend. Hence the book is divided into two parts. The first part describes the basic principles of structural geology that are required to understand the evolutionary model described in the second part. The book incorporates some of the ignored structural features, e.g. Pre-Himalayan rift tectonics, reactivation of faults, simultaneous development of folds and thrust faults, superposed folds, strike-slip faults developed during the early and superposed deformation, problems with the GPS data, erratic crustal shortening obtained by restoration of deformed sections, etc. The proposed model is essentially based on inversion tectonics and provides answers to some unsolved questions.

Due April 2014
Monograph
2014. 200 p. 310 illus. (Springer Geology) Hardcover
► approx. $139.00
ISBN 978-3-319-05587-9
M. Fischinger, University of Ljubljana Fac. of Civil and Geodetic Engineering, Ljubljana, Slovenia (Ed)

**Performance-Based Seismic Engineering: Vision for an Earthquake Resilient Society**

Bled workshops (organized in 1992, 1997, 2004) have traditionally produced reference books providing vision for the future development of earthquake engineering as foreseen by leading researchers in the field. The participants of the 2011 workshop, presenting the vision of the three world regions which lead in earthquake engineering – Japan and Asia, Europe, and the Americas - built on the tradition of these events initiated by Professors Fajfar and Krawinkler to honor their important research contributions. Considering regional differences and the experience gained during recent major catastrophes (L’Aquila, Haiti, Chile, Tohoku, Christchurch) they built a common global vision for future development of earthquake engineering and seismic risk management.

**Due July 2014**

Contributed volume

2014. XV, 474 p. 257 illus., 91 in color. (Geotechnical, Geological and Earthquake Engineering, Volume 32)

Hardcover

$179.00

ISBN 978-94-017-8874-8

W. G. Gray, C. T. Miller, University of North Carolina, Chapel Hill, NC, USA

**Introduction to the Thermodynamically Constrained Averaging Theory for Porous Medium Systems**

Available

Monograph

2014. XXXIV, 582 p. 12 illus., 11 in color. (Advances in Geophysical and Environmental Mechanics and Mathematics) Hardcover

$129.00

ISBN 978-3-319-04009-7

N. S. Gupta, Bryant University, Smithfield, RI, USA

**Biopolymers**

A molecular paleontology approach

This book on the science of molecular paleontology features experiments of the morphology, ultrastructure and chemical composition of plant and animal fossils. It examines how organisms transform in earth history and their survivability in the fossil record.

**Due March 2014**

Monograph

2014. XXV, 174 p. 62 illus., 3 in color. (Topics in Geobiology, Volume 38)

Hardcover

$189.00

ISBN 978-94-007-7935-8

M. Hamada, Waseda University, Tokyo, Japan

**Engineering for Earthquake Disaster Mitigation**

Earthquake and tsunami disasters have been increasing rapidly and globally in the last quarter-century. The purpose of this book is to provide essential knowledge and information on the mitigation of earthquakes and tsunamis for graduate students, young researchers, and geotechnical engineers.

**Due April 2014**

Monograph

2014. XVI, 122 p. 351 illus., 234 in color. (Springer Series in Geomechanics and Geoengineering) Hardcover

$129.00

ISBN 978-4-431-54891-1

D. I. Hembree, Ohio University, Atlanta, OH, USA; B. F. Platt, University of Mississippi, Lawrence, KS, USA; J. J. Smith, Kansas Geological Survey, Lawrence, KS, USA (Eds)

**Experimental Approaches to Understanding Fossil Organisms**

Lessons from the Living

Paleontologists and geologists struggle with research questions often complicated by the loss or even absence of key paleobiological and paleoenvironmental information. Insight into this missing data can be gained through direct exploration of analogous living organisms and modern environments. Creative, experimental and interdisciplinary treatments of such ancient-Earth analogs form the basis of Lessons from the Living. This volume unites a diverse range of expert paleontologists, neontologists and geologists presenting case studies that cover a spectrum of topics, including functional morphology, taphonomy, environments and organism-substrate interactions.

**Due March 2014**

Contributed volume

2014. I, 548 p. 118 illus., 48 in color. (Topics in Geobiology, Volume 41)

Hardcover

$229.00

ISBN 978-94-017-8720-8

M. B. Kalinowski, CTBTO Preparatory Commission, Vienna, Austria; A. Becker, Weltzentrum für Niederschlagsklimatologie, Offenbach am Main, Germany (Eds)

**Recent Advances in Nuclear Explosion Monitoring**

Volume II

This volume is a follow-up of PAGEOPH Topical Volume 167 (2010) and again reports on the latest advances in science and technology that have been achieved to monitor compliance with the Comprehensive Nuclear-Test-Ban Treaty (CTBT). This progress in the development and testing of new sensor technologies and analysis methodologies in all relevant scientific disciplines improves the detection, location and characterization of CTBT–relevant events.

**Due May 2014**

Contributed volume

Only available in print

2014. Approx. 455 p. (Pageoph Topical Volumes) Softcover

$89.99

ISBN 978-3-0348-0818-7
N. Kapucu, K. T. Liou, University of Central Florida, Orlando, FL, USA (Eds)

Disaster and Development
Examining Global Issues and Cases

This book offers a systematic, empirical examination of the concepts of disasters and sustainable economic development applied to many cases around the world.

Due April 2014
Contributed volume

2014, I, 723 p. 25 illus., 10 in color. (Environmental Hazards) Hardcover
► $179.00
ISBN 978-3-319-04467-5

M. Knez, T. Slabe, M. Petrič, ZRC SAZU, Postojna, Slovenia; S. Šebela, RC SAZU, Postojna, Slovenia (Eds)

The Beka-Ocizla Cave System
Karstological Railway Planning in Slovenia

This book offers information derived from extensive karstological and planning studies for a proposed railway on the Venice-Kiev European Railway Corridor, between the northern Adriatic ports of Koper, Slovenia and Trieste, Italy and the interior of Slovenia.

Due June 2014
Monograph

2014, 200 p. 140 illus., 70 in color. (Cave and Karst Systems of the World) Hardcover
► approx. $139.00
ISBN 978-3-319-04455-2

M. Leclerc, University of Georgia Lab.
Environmental Physics, Griffin, GA, USA; T. Foken, Universität Bayreuth, Bayreuth, Germany

Footprints in Micrometeorology and Ecology

The interpretation of meteorological measurements made at a given level over a surface of characteristic properties in roughness, albedo, heat, moisture, carbon dioxide, and other gases is an old question which goes back to the early beginnings of modern micrometeorology. This is a challenging question especially since these measurements are only valid for this point/region, describe conditions exactly, or if these measurements are influenced also by surrounding areas. After 50 years of field experiments, it became both apparent and problematic that meteorological measurements are influenced from surfaces on the windward side. An extension of these measurements also at inhomogeneous experimental sites requires a quantitative knowledge of such influences.

Due June 2014
Monograph

2014, 180 p. 108 illus., 41 in color. Hardcover
► approx. $139.00
ISBN 978-3-642-54544-3

K. Pitilakis, P. Franchin, B. Khazai, H. Wenzel (Eds)

Methodology and Applications

Due July 2014
Monograph

2014, X, 440 p. 187 illus., 78 in color. (Geotechnical, Geological and Earthquake Engineering, Volume 31) Hardcover
► approx. $179.00
ISBN 978-94-017-8834-2

M. Mudelsee, Climate Risk Analysis, Hannover, Germany

Climate Time Series Analysis
Classical Statistical and Bootstrap Methods

Written for climatologists and applied statisticians, this book explains the bootstrap algorithms (including novel adaptions) and methods for confidence interval construction. The accuracy of the algorithms is tested by means of Monte Carlo experiments.

Due June 2014
Monograph

2nd ed. 2014, XXXVIII, 504 p. 99 illus. (Atmospheric and Oceanographic Sciences Library, Volume 51) Hardcover
► $229.00
ISBN 978-3-319-04449-1

V. Ryabov, A. Shevko, M. Gora, Russian Academy of Sciences Inst. Geology, Mineralogy & Novosibirsk, Russia

Trap Magmatism and Ore Formation in the Siberian Noril’sk Region


This book offers petrographic and geochemical data on principal igneous rock types of the Noril’sk region, and shows that these data provide unique solutions to problems of petrogenesis and mineralization. Includes thin-section photos of igneous rock types.

Available
Monograph

2014, XX, 1007 p. 542 illus., 428 in color. (Modern Approaches in Solid Earth Sciences) (2-volume-set)
► $229.00
ISBN 978-94-017-8699-7
D. Sengupta, Indian Institute of Technology, Kharagpur, India (Ed)

**Recent Trends in Modelling of Environmental Contaminants**

The book deals primarily with the aspects like energy resources and its proper utilization, disposal of various forms of wastes and its effects and effects of major catastrophic events like nuclear disasters, global warming, etc.

**Due April 2014**

Contributed volume

2014, 1, 449 p. 96 illus. Hardcover  
▸ $179.00  
ISBN 978-81-322-1782-4

R. Shaw, Kyoto University, Kyoto, Japan; T. Izumi, Tohoku University, Sendai, Japan (Eds)

**Civil Society Organization and Disaster Risk Reduction**

The Asian Dilemma

Civil society organizations (CSOs) have played important roles over the years in the disaster field. Starting from the traditional approach of response and relief, the emphasis has gradually shifted to disaster risk reduction. From international non-governmental organizations (NGOs) to national and local NGOs, all stakeholders have recognized the significance of and need for community-based risk reduction. In their different capacities they have endeavored to establish links to the policy options at the local and national levels. There still are many issues that remain untouched by CSOs, however, and local CSOs face special challenges in resources in terms of human, financial, and technical issues.

**Due April 2014**

Monograph

2014, IX, 291 p. 55 illus., 50 in color. (Disaster Risk Reduction) Hardcover  
▸ $129.00  
ISBN 978-4-431-54876-8

M. Srbulov, Isleworth, UK

**Practical Guide to Geo-Engineering**

With Equations, Tables, Graphs and Check Lists

This handy reference assembles and organizes the most-needed formulas, tables, graphs and check lists into six major subfields of geo-engineering: investigations, testing, properties, hazards, structures and works.

**Due May 2014**

Monograph

2014, XII, 273 p. 146 illus., 6 in color. (Geotechnical, Geological and Earthquake Engineering, Volume 29) Hardcover  
▸ $129.00  
ISBN 978-94-017-8637-9

M. Weber, GFZ, German Research Centre for Geosciences, Potsdam, Germany; U. Münch, Coordination Office GEOTECHNOLOGIEN, Potsdam, Germany (Eds)

**Tomography of the Earth’s Crust: From Geophysical Sounding to Real-Time Monitoring**

GEOTECHNOLOGIEN Science Report No. 21

Available

Monograph

2014, X, 176 p. 84 illus., 28 in color. (Advanced Technologies in Earth Sciences) Hardcover  
▸ $129.00  
ISBN 978-3-319-04204-6

E. Albrecht, Brandenburg University of Technology Cottbus, Cottbus, Germany; M. Schmidt, Brandenburg University of Technology Cottbus, Cottbus, Germany; M. Miiller-Behr, S. P. Spyla, Brandenburg University of Technology Cottbus, Cottbus, Germany (Eds)

**Implementing Adaptation Strategies by Legal, Economic and Planning Instruments on Climate Change**

The causes and effects of climate change are just as varied as the proposed solutions and approaches for dealing with the problem. Given the global character of climate change, comprehensive global cooperation is called for that leads to effective and appropriate international action in accordance with the respective responsibilities. These will inevitably differ depending on the capabilities and the social and economic situations of the respective actors.

**Due May 2014**

Contributed volume

2014, X, 330 p. 45 illus., 31 in color. (Environmental Protection in the European Union, Volume 4) Hardcover  
▸ $179.00  
ISBN 978-3-540-77613-0

L. Bengtsson, R.-M. Bonnet, M. Calisto, International Space Science Institute, Bern, Switzerland; G. Destouni, Stockholm University, Stockholm, Sweden; R. Gurney, University of Reading, Reading, UK; J. Johannessen, Nansen Environmental and Remote Sensing Center, Bergen, Norway; Y. Kerr, Center for the Study of the Biosphere from Space, Toulouse, France; W. Lahoz, Norwegian Institute for Air Research, Kjeller, Norway; M. Rast, ESA-ESRIN, Frascati, Italy (Eds)

**The Earth’s Hydrological Cycle**

This book gives a comprehensive presentation of our present understanding of the Earth’s hydrological cycle and the problems, consequences and impacts that go with this topic. Water is a central component in the Earth’s system. It is indispensable for life on Earth in its present form and influences virtually every aspect of our planet’s life support system. On relatively short time scales, atmospheric water vapor interacts with the atmospheric circulation and is crucial in forming the Earth’s climate zones. Water vapor is the most powerful of the greenhouse gases and serves to enhance the tropospheric temperature.

**Due May 2014**

Monograph

2014, X, 280 p. 200 illus., 140 in color. (Space Sciences Series of ISSI, Volume 46) Hardcover  
▸ approx. $129.00  
ISBN 978-94-017-8788-8
Globalisation and rapid social and environmental change in recent decades have brought into sharper focus not only the benefits but also the costs of economic development.

Due April 2014
Contributed volume

2014. XXII, 281 p. 9 illus. (CSR, Sustainability, Ethics & Governance) Hardcover
$179.00
ISBN 978-3-642-53872-8

Resource Curse or Cure?
On the Sustainability of Development in Western Australia

M. Brueckner, Murdoch University, Murdoch, WA, Australia; A. Durey, R. Mayes, C. Pforr, Curtin University, Perth, WA, Australia (Eds)

Adapting to an Uncertain Climate
Lessons From Practice

Climate change highlights the challenges for long-term policy making in the face of persistent and irreducible levels of uncertainties. It calls for the development of flexible approaches, innovative governance and other elements that contribute to effective and adaptive decision-making.

Due April 2014
Contributed volume

2014. X, 203 p. 38 illus. in color. Hardcover
$129.00
ISBN 978-3-319-04875-8

Current Environmental Issues and Challenges

This book spans a broad spectrum of topics from air pollution to energy to water quality monitoring and techniques for handling environmental pollutants. Offers an analysis of green business, and a chapter on grid/cloud-based collaborative problem solving.

Due April 2014
Graduate/Advanced undergraduate textbook

2014. XIV, 260 p. 152 illus., 97 in color. Hardcover
$89.99
ISBN 978-94-017-8776-5

The Soils of the Philippines

This book features a master listing of all soil series in the Philippines. It shows soil thematic layers overlain on satellite images and contains an updated soil map to consolidate several decades of soil survey activities.

Due May 2014
Monograph

$229.00
ISBN 978-94-017-8681-2

Perspectives on the Restoration of the Mississippi Delta

The Once and Future Delta

Human impacts and emerging mega-trends such as climate change and energy scarcity will impact natural resource management in this century.

Due April 2014
Contributed volume

2014. I, 333 p. 82 illus., 60 in color. (Estuaries of the World) Hardcover
$179.00
ISBN 978-94-017-8732-1

Historical Perspectives of Fisheries Exploitation in the Indo-Pacific

The waters of the Indo-Pacific were at the centre of the global expansion of marine capture fisheries in the twentieth century, yet surprisingly little has been written about this subject from a historical perspective.

Due April 2014
Contributed volume

2014. I, 269 p. 49 illus., 8 in color. (MARE Publication Series, Volume 12) Hardcover
$129.00
ISBN 978-94-017-8726-0
M. Fischer-Kowalski, Institute of Social Ecology
Alpen Adria University, Vienna, Austria; A. Reenberg,
University of Copenhagen, København K, Denmark;
A. Schaffartzik, A. Mayer, Institute of Social Ecology
Alpen Adria University, Vienna, Austria (Eds)

Ester Boserup’s Legacy on Sustainability
Orientations for Contemporary Research
Due February 2014
Contributed volume

2014. XXVII, 265 p. 44 illus., 22 in color. (Human-
Environment Interactions, Volume 4) Hardcover
► $129.00
ISBN 978-94-017-8677-5

A. E. Hartemink, K. McSweeney, University of
Wisconsin – Madison, Madison, WI, USA (Eds)

Soil Carbon
Few topics cut across the soil science discipline
wider than research on soil carbon. This book con-
tains 48 chapters that focus on novel and exciting
aspects of soil carbon research from all over the
world. It includes review papers by global leaders
in soil carbon research, and the book ends with a
list and discussion of global soil carbon research
priorities.

Due April 2014
Contributed volume

2014. XIV, 518 p. 135 illus., 80 in color. (Progress in
Soil Science) Hardcover
► $179.00
ISBN 978-3-319-04083-7

V. V. Goncharuk, Institute of Colloid and Water
Chemistry National Academy of Sciences of Ukraine,
Kyiv, Ukraine

Drinking Water
Physics, Chemistry and Biology
This book presents a broad examination into
drinking water. It probes its role in human life
and in the history of our planet as well as surveys
the latest scientific understanding of purification
techniques and standards for the protection of
water quality.

Due April 2014
Monograph

2014. Approx. 300 p. 100 illus., 29 in color. Hardcover
► $129.00
ISBN 978-3-319-04333-3

J. Iglesias, L. Fuentes, Instituto Español de
Oceanografía (IEO), Vigo, Spain; R. Villanueva,
Institut de Ciències del Mar (CSIC), Barcelona, Spain
(Eds)

Cephalopod Culture
Cephalopod Culture is the first compilation of
research on the culture of cephalopods.

Due March 2014
Contributed volume

2014. I, 626 p. 140 illus., 40 in color. Hardcover
► $229.00
ISBN 978-94-017-8647-8

T. Islam, NOAA/NESDIS Center for Satellite
Applications and Research College Park, MD, USA,
Fort Collins, CO, USA; P. K. Srivastava, ESSIC/NASA
Goddard Space Flight Center, Greenbelt, MD, USA;
M. Gupta, IIT Delhi, Delhi, India; X. Zhu, Monash
University, Melbourne, Australia; S. Mukherjee,
Jawaharlal Nehru University, New Delhi, India (Eds)

Computational Intelligence
Techniques in Earth and Environmental Sciences
Available
Contributed volume

2014. XV, 266 p. 89 illus., 50 in color. Hardcover
► $129.00
ISBN 978-94-017-8641-6

W. Klöpffer, LCA Consult & Review, Frankfurt am
Main, Germany (Ed)

Background and Future
Prospects in Life Cycle
Assessment
Due March 2014
Contributed volume

2014. XII, 262 p. 25 illus., 5 in color. (LCA
Compendium – The Complete World of Life Cycle
Assessment) Hardcover
► $129.00
ISBN 978-94-017-8696-6

J. Iglesias, L. Fuentes, Instituto Español de
Oceanografía (IEO), Vigo, Spain; R. Villanueva,
Institut de Ciències del Mar (CSIC), Barcelona, Spain
(Eds)
**Climate Adaptation Santiago**

This book addresses the complexity of urbanization, impacts of climate change and climate change adaptation for the metropolitan region of Santiago, with a special focus on the most pressing issues of natural hazards, water and energy supply. The book exemplifies a conceptual approach for the development of adaptation measures, their evaluation and implementation in a decision support framework at the science-policy interface.

**Due March 2014**

Contributed volume

2014. XII, 216 p. 27 illus., 3 in color. Hardcover

► $129.00

ISBN 978-3-642-39102-6

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**Chlorinated Solvent Source Zone Remediation**


**Underwater Seascapes**

From geographical to ecological perspectives

**Due March 2014**

Contributed volume

2014. XVII, 287 p. 110 illus., 90 in color. Hardcover

► $129.00

ISBN 978-3-319-03439-3

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**Assessment of Carbon Footprint in Different Industrial Sectors – Volume 2**

Followed by the previous part (Volume-1), Volume-2 of carbon footprint assessment book deals with the assessment of carbon footprint in different other sectors, which were not dealt in the first part.

**Due April 2014**

Monograph

2014. X, 526 p. 80 illus., 50 in color. (EcoProduction) Hardcover

► $109.00

ISBN 978-3-642-39102-6

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**Climate Change and Indigenous Peoples in the United States**

**J. K. Maldonado**, American University, Washington, DC, USA; **C. Benedict**, University of Arizona, Tucson, AZ, USA; **R. Pandya**, University Corporation for Atmospheric Research, Boulder, CO, USA (Eds)

**Impacts, Experiences and Actions**

With a long history and deep connection to the Earth’s resources, indigenous peoples have an intimate understanding and ability to observe the impacts linked to climate change. Traditional ecological knowledge and tribal experience play a key role in developing future scientific solutions for adaptation to the impacts. The book explores climate-related issues for indigenous communities in the United States, including loss of traditional knowledge, forests and ecosystems, food security and traditional foods, as well as water, Arctic sea ice loss, permafrost thaw and relocation. The book also highlights how tribal communities and programs are responding to the changing environments. Fifty authors from tribal communities, academia, government agencies and NGOs contributed to the book.

**Due May 2014**

Monograph

2014. 200 p. 50 illus. in color. Hardcover

► approx. $109.00

ISBN 978-3-319-05265-6

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**The Climate Showdown**

11 December 2015 - A Final Call for a 2°max-Paris Protocol

The book one of the founders of (German) Environmental and Climate Economics Prof. Dr. Lutz Wicke and the science journalist Dr. Markus Schulte von Drach show, why a 2°max-Paris Protocol as a follow-up Kyoto Protocol must be reached by 13 December 2015 and how this can be achieved. The basic article of Prof. Hans-Joachim Schellnhuber and Dr. Daniel Klingenfeld shows, why a very realistic 4°C warmer world by 2100 must be avoided in any case. One of the most important climate scientists of the world and a Harvard M.Sc. show very intensively how important it will be for mankind all over the world to avoid this most realistic warming of our planet – without any overstatement. Their report is based on PIK-Report for the World Bank.

**Due April 2014**

Monograph

2014. X, 145 p. 6 illus. in color. Hardcover

► $129.00

ISBN 978-3-642-39102-6

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**Assessment of Carbon Footprint in Different Industrial Sectors – Volume 2**

Followed by the previous part (Volume-1), Volume-2 of carbon footprint assessment book deals with the assessment of carbon footprint in different other sectors, which were not dealt in the first part.

**Due April 2014**

Monograph

2014. X, 526 p. 80 illus., 50 in color. (EcoProduction) Hardcover

► $109.00

ISBN 978-3-642-39102-6
River Control in India
Spatial, Governmental and Subjective Dimensions

Using India as a case study, this book identifies the spatial aspects of norms through which concepts of the ideal river and the deficient river in need of control are created. Examines different subjective stances arising from the same body of expertise.

Available
Monograph
2014. XV, 165 p. 2 illus., 1 in color. (Advances in Asian Human-Environmental Research) Hardcover
► $129.00
ISBN 978-3-319-04431-6

The Geography of Georgia
Problems and Perspectives

This book discusses the political and economic history and geography of Georgia and the problems it has faced and how it has overcome and is overcoming them. At the end of the 20th century in a majority of countries in the world, successful resolution of social-economic, political, demographic and ecological problems was largely dependent on the protection of population and engineering-economic objects from natural disasters and the ensuring conditions for their sustainable development. These problems are most acute in mountainous regions, like Georgia, where unplanned development of natural ecosystems results in drastic consequences.

Due June 2014
Monograph
2014. 300 p. 186 illus., 148 in color. (World Regional Geography Book Series) Hardcover
► approx. $129.00
ISBN 978-3-319-05412-4

Remote Sensing of the African Seas

This volume reviews the current potential of earth observations to help in the exploration of the marginal seas around Africa, covering both passive and active techniques, working in several spectral ranges.

Due March 2014
Monograph
2014. XXVI, 421 p. 187 illus., 124 in color. Hardcover
► $179.00
ISBN 978-94-017-8007-0

Planning and Designing Sustainable and Resilient Landscapes

This book covers landscape architecture from the points of view of architecture, geography, history and communication science. It provides approaches to intervention, through rehabilitation and upgrade, as well as participative methods.

Available
Monograph
2014. XVIII, 303 p. 126 illus., 117 in color. (Springer Geography) Hardcover
► $129.00
ISBN 978-94-017-8535-8

Landscapes and Landforms of Spain

This splendid resource for geomorphologists is a unique English-language guide to the stunningly diverse and spectacular landscapes of Spain. Superbly illustrated throughout, it features location- and theme-specific chapters alongside a general review.

Due April 2014
Monograph
2014. XXXVIII, 406 p. 248 illus., 243 in color. (World Geomorphological Landscapes) Hardcover
► $129.00
ISBN 978-94-017-8627-0
K. L. Maharjan, Hiroshima University, Hiroshima University, Japan (Ed)

**Communities and Livelihood Strategies in Developing Countries**

This book examines innovative livelihood and agricultural innovation adoption by rural farmers. It shows the impact of changing climate on crop yields, short and long term revenues with adequate incorporation of adaptive responses in Ghana and Nepal.

**Due May 2014**

Monograph

2014. XXI, 178 p. 54 illus., 50 in color. Hardcover

$129.00

ISBN 978-4-431-54773-0

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M. Madden, University of Georgia Dept. Geography, Athens, GA, USA (Ed)

**Landscape Analysis using Geospatial Tools**

The subject of Landscape Analysis using Geospatial Tools is the combination of geospatial tools such as remote sensing, geographic information systems (GIS), Global Positioning System (GPS), geostatistics and geovisualization (e.g., 3D displays, fly throughs, animation) to analyze landscapes, assess human impacts on earth resources, visualize changes over time and conduct research in landscape ecology. This book truly bridges two broad disciplines, ecology and geography. More specifically, it integrates research and techniques in landscape ecology and geographic information science (GISc), Global Positioning System (GPS), geostatistics and geovisualization (e.g., 3D displays, fly throughs, animation) to analyze landscapes, assess human impacts on earth resources, visualize changes over time and conduct research in landscape ecology. This book truly bridges two broad disciplines, ecology and geography. More specifically, it integrates research and techniques in landscape ecology and geographic information science (GISc), Global Positioning System (GPS), geostatistics and geovisualization (e.g., 3D displays, fly throughs, animation) to analyze landscapes, assess human impacts on earth resources, visualize changes over time and conduct research in landscape ecology. This book truly bridges two broad disciplines, ecology and geography. More specifically, it integrates research and techniques in landscape ecology and geographic information science (GISc), Global Positioning System (GPS), geostatistics and geovisualization (e.g., 3D displays, fly throughs, animation) to analyze landscapes, assess human impacts on earth resources, visualize changes over time and conduct research in landscape ecology. This book truly bridges two broad disciplines, ecology and geography. More specifically, it integrates research and techniques in landscape ecology and geographic information science (GISc), Global Positioning System (GPS), geostatistics and geovisualization (e.g., 3D displays, fly throughs, animation) to analyze landscapes, assess human impacts on earth resources, visualize changes over time and conduct research in landscape ecology. This book truly bridges two broad disciplines, ecology and geography. More specifically, it integrates research and techniques in landscape ecology and geographic information science (GISc), Global Positioning System (GPS), geostatistics and geovisualization (e.g., 3D displays, fly throughs, animation) to analyze landscapes, assess human impacts on earth resources, visualize changes over time and conduct research in landscape ecology. This book truly bridges two broad disciplines, ecology and geography. More specifically, it integrates research and techniques in landscape ecology and geographic information science (GISc), Global Positioning System (GPS), geostatistics and geovisualization (e.g., 3D displays, fly throughs, animation) to analyze landscapes, assess human impacts on earth resources, visualize changes over time and conduct research in landscape ecology. This book truly bridges two broad disciplines, ecology and geography. More specifically, it integrates research and techniques in landscape ecology and geographic information science (GISc), Global Positioning System (GPS), geostatistics and geovisualization (e.g., 3D displays, fly throughs, animation) to analyze landscapes, assess human impacts on earth resources, visualize changes over time and conduct research in landscape ecology. This book truly bridges two broad disciplines, ecology and geography. More specifically, it integrates research and techniques in landscape ecology and geographic information science (GISc), Global Positioning System (GPS), geostatistics and geovisualization (e.g., 3D displays, fly throughs, animation) to analyze landscapes, assess human impacts on earth resources, visualize changes over time and conduct research in landscape ecology. This book truly bridges two broad disciplines, ecology and geography. More specifically, it integrates research and techniques in landscape ecology and geographic information science (GISc), Global Positioning System (GPS), geostatistics and geovisualization (e.g., 3D displays, fly throughs, animation) to analyze landscapes, assess human impacts on earth resources, visualize changes over time and conduct research in landscape ecology. This book truly bridges two broad disciplines, ecology and geography. More specifically, it integrates research and techniques in landscape ecology and geographic information science (GISc), Global Positioning System (GPS), geostatistics and geovisualization (e.g., 3D displays, fly throughs, animation) to analyze landscapes, assess human impacts on earth resources, visualize changes over time and conduct research in landscape ecology. This book tr

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