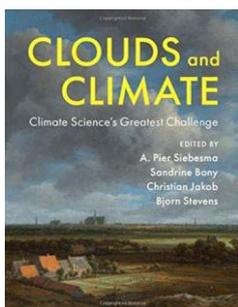


## Clouds and Climate



v pevné vazbě, 418 stran  
vyd. Cambridge University Press,  
VIII/2020  
ISBN 9781107061071

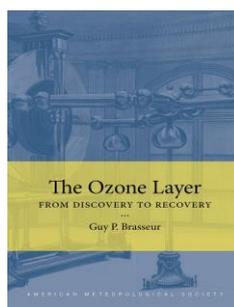
katalog.cena cca 2.100 Kč vč.DPH  
v této nabídce **1.760 Kč** vč.DPH

Cloud research is a rapidly developing branch of climate science that's vital to climate modelling. With new observational and simulation technologies our knowledge of clouds and their role in the warming climate is accelerating. This book provides a comprehensive overview of research on clouds and their role in our present and future climate, covering theoretical, observational, and modelling perspectives.

Part I discusses clouds from three different perspectives: as particles, light and fluid. Part II describes our capability to model clouds, ranging from theoretical conceptual models to applied parameterised representations. Part III describes the interaction of clouds with the large-scale circulation in the tropics, mid-latitudes, and polar regions.

Part IV describes how clouds are perturbed by aerosols, the land-surface, and global warming. Each chapter contains end-of-chapter exercises and further reading sections, making this an ideal resource for advanced students and researchers in climatology, atmospheric science, meteorology, and climate change.

## Ozone Layer



v měkké vazbě, 248 stran  
vyd. American Meteorological Society,  
IV/2020  
ISBN 9781944970543

katalog.cena cca 1.040 Kč vč.DPH  
v této nabídce **880 Kč** vč.DPH

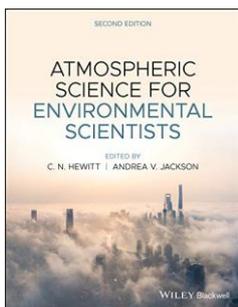
From the discovery of ozone in the eighteenth century, through the late twentieth-century international agreements to protect humanity from the destruction of ozone in the stratosphere, Guy P. Brasseur traces the evolution of our scientific knowledge on air quality issues and stratospheric chemistry and dynamics. The history of ozone research is marked by typical examples of the scientific method at work, perfectly illustrating how knowledge progresses.

Hypotheses are contested and then eventually accepted or rejected; truths once believed to be universal and permanent can be called into question; and debates and disagreements between scientists are settled by information from laboratory and field experiments. Of course, the scientific method can also lead to new observations—in this case, the discovery of the ozone hole. This finding took researchers by surprise, leading to new investigations and research programs.

This first complete study of ozone research demonstrates the key role fundamental research plays in solving global environmental, climate, and human health problems. More importantly, it shows that the scientific method works. Convincing decision makers of research results that do not correspond to their values, or to the interests of certain business groups, stands to be the highest hurdle in using science to benefit humanity.

Students, early-career scientists, and even specialists who do not know much about the history of their field will benefit from this big picture view, offered by a researcher who has played leadership roles in stewarding this science through decades of discovery.

## Atmospheric Science for Environmental Scientists



v měkké vazbě, 432 stran  
vyd. Wiley-Blackwell, 2.vydání,  
II/2020  
ISBN 9781119515227

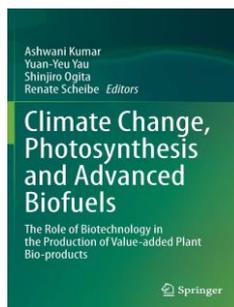
katalog.cena cca 2.100 Kč vč.DPH  
v této nabídce **1.700 Kč** vč.DPH

Enlightens readers on the realities of global atmospheric change, including global warming and poor air quality. Climate change and air pollution are two of the most pressing issues facing Mankind. This book gives undergraduate and graduate students, researchers and professionals working in the science and policy of pollution, climate change and air quality a broad and up-to-date account of the processes that occur in the atmosphere, how these are changing as Man's relentless use of natural resources continues, and what effects these changes are having on the Earth's climate and the quality of the air we breathe. Written by an international team of experts, Atmospheric Science for Environmental Scientists, 2nd Edition provides an excellent overview of our current understanding of the state of the Earth's atmosphere and how it is changing.

The first half of the book covers: the climate of the Earth; chemical evolution of the atmosphere; atmospheric energy and the structure of the atmosphere; biogeochemical cycles; and tropospheric chemistry and air pollution. The second half looks at cloud formation and chemistry; particulate matter in the atmosphere; stratospheric chemistry and ozone depletion; boundary layer meteorology and atmospheric dispersion; urban air pollution; and global warming and climate change science.

It will also appeal to those interested in learning how the atmosphere works, how humankind is changing its composition, and what effects these changes are leading to.

## Climate Change, Photosynthesis and Advanced Biofuels



v pevné vazbě, 490 stran  
vyd. Springer Verlag, IX/2020  
ISBN 9789811552274

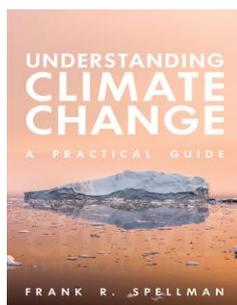
katalog.cena cca 4.580 Kč vč.DPH  
v této nabídce **3.660 Kč** vč.DPH

The use of fossil fuels results in rising CO<sub>2</sub> and other greenhouse gas (GHG) emissions, causing global temperature rise and climate change that will negatively impact human health, the food supply, and eventually worsen hunger and misery. Presently, fossil fuels meet 88% of the energy demand, resulting in rising CO<sub>2</sub>/GHG emissions at alarming rates. The increased use of biofuels would help to mitigate climate change.

Efficiently designing methods for the production of biofuels and plant-derived high-value products requires a deeper understanding of photosynthetic processes as a prerequisite for applying novel biotechnologies. Accordingly, this book provides ample information and a wealth of illustrative examples. The book's eighteen richly illustrated chapters are divided into three thematic parts.

I: Photosynthesis and Biomass Production under Changing Conditions, II: Microalgae and Engineered Crops for Production of Biofuels and High-value Products, and III: Genetic Resources and Engineering Methods to Improve Crop Plants. Readers will find the latest information on the molecular basis of photosynthetic processes in plants (including the regulatory principles that allow plants to maintain homeostasis under changing conditions), stress resistance and synthetic pathways. In addition, the basic principles of important biotechnologies, as well as examples of specially designed crops capable of growing under stress conditions with improved productivity, are presented.

## Understanding Climate Change



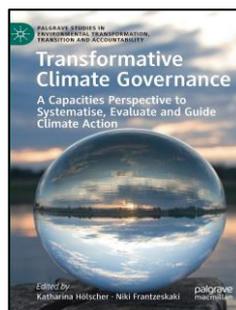
v měkké vazbě, 300 stran  
vyd. Bernan Press, X/2020  
ISBN 9781641434218

katalog.cena cca 2.960 Kč vč.DPH  
v této nabídce **2.640 Kč** vč.DPH

In this thought-provoking title, the author stresses the need for more scientific study and less panic to truly understand climate change. Using science, Frank R. Spellman will attempt to answer many questions surrounding climate change such as what is really happening to our planet, why is it happening, and what can and should we do about it.

Although human behavior did not cause climate change, Frank R. Spellman, PhD will discuss how it is making it worse. Understanding Climate Change: A Practical Guide covers many topics including global warming, fossil fuels, greenhouse gas, flooding, and reforestation.

## Transformative Climate Governance



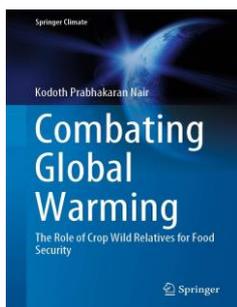
v pevné vazbě, 698 stran  
vyd. Springer Verlag, IX/2020  
ISBN 9783030490393

katalog.cena cca 3.720 Kč vč.DPH  
v této nabídce **2.980 Kč** vč.DPH

How to progress climate science to be policy-relevant and actionable? This book presents a novel framework to give a positive vision and structuring approach to guide research and practice on transformative climate governance, to shift the narrative from apathy and stalemate to action and transformation. Our vision contrasts existing climate governance and associated lock-ins that signify the institutional resistance to change. To effectively address climate change, climate governance itself needs to be transformed to foster sustainability transitions under climate change.

The book brings together a collection of case studies to investigate how capacities for transformative climate governance are developing at multiple scales and how they can be strengthened vis-a-vis existing governance regimes. Specifically, it sheds light on the following questions: What are key overarching conditions, actors and activities that facilitate governance for transformation under climate change? Given persistent climate governance lock-ins, what needs to happen in research and policy to build-up the capacities that transform climate governance and ensure effective climate action?

## Combating Global Warming



v pevné vazbě, 120 stran  
vyd. Springer Verlag, VIII/2019  
ISBN 9783030230364

katalog.cena cca 3.440 Kč vč.DPH  
v této nabídce **2.740 Kč** vč.DPH

This book critically examines the environmental hazards posed by global warming with regard to future food security, which will depend on a combination of stresses, both biotic and abiotic, imposed by climate change; variability of weather within a growing season; and the development of cultivars that are more sensitive to different ambient conditions. Furthermore, the ability to develop effective adaptive strategies which allow these cultivars to express their genetic potential under changing climate conditions will be essential. In turn, the book investigates those plant species which are very closely related to field crops and have the potential to contribute beneficial traits for crop improvement, e.g. resistance to a wide range of biotic and abiotic stresses, enriching the gene pool, and ultimately leading to enhanced plant yield, known as "Crop Wild Relatives" (CWRs). CWRs hold tremendous potential to sustain and enhance global food security, contributing to human well-being. Accordingly, their development, characterization and conservation in crop breeding programs have assumed great practical importance.

Professor Kodoth Prabhakaran Nair is an internationally acclaimed agricultural scientist, with over three decades of experience in Europe, Africa and Asia, holding some of the most prestigious academic positions, including the National Chair of the Science Foundation, The Royal Society, Belgium.

## Transnational Environmental Policy: Reconstructing Ozone



v měkké vazbě, 272 stran  
vyd. Routledge, VI/2020  
ISBN 9780367604899

katalog.cena cca 1.200 Kč vč.DPH  
v této nabídce **990 Kč** vč.DPH

Transnational Environmental Policy analyses a surprising success story in the field of international environmental policy making: the threat to the ozone layer posed by industrial chemicals, and how it has been averted. The book also raises the more general question about the problem-solving capacities of industrialised countries and the world society as a whole. Reiner Grundmann investigates the regulations which have been put in place at an international level, and how the process evolved over twenty years in the US and Germany.