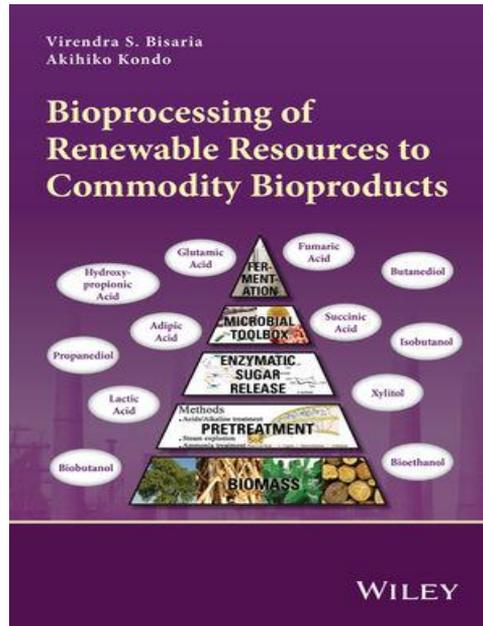


BOOK REVIEW

Bioprocessing of Renewable Resources to Commodity Bioproducts.



Virendra S. Bisaria, Akihiko Kondo.

John Wiley & Sons, Inc., Hoboken, New Jersey, USA, 2014.

555 + xiv pages

ISBN 978-1-118-17583-5

Reviewed by Makha Khittasangka, Editor of the *Journal of Perspectives on Development Policy in the Greater Mekong*

The authors; Virendra S. Bisaria Department of Biochemical Engineering and Biotechnology, Indian Institute of Technology Delhi, New Delhi, India, and Akihiko Kondo Department of Chemical Science and Engineering, Graduate School of Engineering, Kobe University, Nada, Japan, both authors had divided the contents of the book into 2 parts.

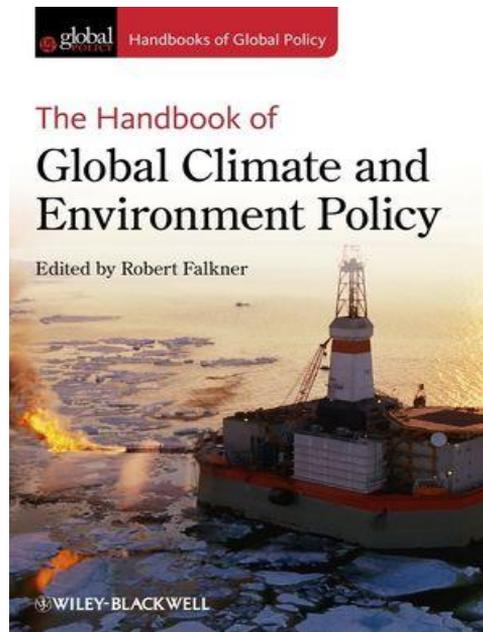
Accordingly, the Part I of the book deals with those enabling technologies that are crucial for the pretreatment and hydrolysis of biomass to give sugar in high yield by cellulolytic enzymes, primarily cellulose and xylanase. This first part also cover the general aspect and the issues involved

in the sustainability of a biorefinery and biomass feedstock logistics and the design of biomass feedstock supply systems.

The part II of the book contains state of-the-art articles on a few chosen commodity products. These products represent most of those identified by the US Department of Energy for incentive investigation for their production from renewal resources. While covering these bioproducts, major emphasis has been given to the discipline of metabolic engineering for the development of sustainable microbial biocatalysts/cell factories which shall enable their production from renewal resources.

The book also provides a unique perspective to the industry about the scientific problems and their possible solutions in making a bioprocess work for commercial production of these commodity bioproducts such as Lactic acid, widely used in the food, pharmaceutical, and polymers industries, is already produced by microbial fermentations or to explore lignocellulosic biomass for Ethanol production, the fermenting yeast must utilize hexose and pentose sugars in the presence of toxic compounds such as acetic acid, formic acid, furfural and 5- hydroxymethylfurfural released during the process of biomass treatment that can decrease ethanol yield and productivity and also disturb cell growth (Hasunuma and Kondo, 2012b; Madhavan et al., 2012), p. 201-226. This book is suitable for researchers, practitioners, students, and consultants in metabolic engineering, bioprocess engineering, and biotechnology.

The Handbook of Global Climate and Environmental Policy.



Robert Falkner

John Wiley & Son, Ltd, The Atrium, South Gate, Chichester, West Sussex, PO19 8SQ, UK, 2013.

530 + xii pages.

ISBN: 978-0-470-67324-9 (cloth)

Reviewed by Teerawat Kaewpia, *The Journal of Perspectives on Development Policy in the Greater Mekong Region*.

Robert Falkner is Reader in International Relations at the London School of Economic and Political Science (LSE). He is an Associate of the Grantham Research Institute on Climate Change and the Environment at LSE and an Associate Fellow of the Energy, Environment and Resources department at Chatham House. He is the author of *Business Power and Conflict in International Environmental Politics* (Palgrave Macmillna, 2008).

The scientific logic of the climate is the Earth's atmosphere acts as a greenhouse effect whereby various gases (carbon dioxide, methane, chlorofluorocarbons, water vapor and others) absorb solar radiation that would otherwise be reflected back into space from the Earth. This greenhouse effect itself is beneficial as it keeps the planet warm and allows life to flourish and thus increasing the warming effect such as ocean acidification, engender sea level rise, increasing in the frequency and severity of storms and droughts, and

more (authors, p. 4). Climate change problem is a stiff challenge precisely because the problem can be conceived in multiple ways (authors, p. 4). In some way, what kind of problem beyond climate science is from a social-economic-political perspective. In order that, *greenhouse emission arise from virtually every human activity, dependence on fossil fuels is uneven, and others* (authors, p. 6).

The Handbook of Global Climate and Environment Policy presents an authoritative and comprehensive overview of global policy on climate change and other environmental issues. The purpose of this *Handbook* is to help with essential provide and survey an authoritative guide to recent academic research on main global climate and environment policy from the best research in field. The *Handbook* covers perspectives from international relations and political science, as well as economics, environmental studies, geography, and international law.

The contributions to the *Handbook* - are grouped into four broad parts.

- First part, *on global policy challenges*, that review specific environmental issues and the global policy responses, governance and climate challenge included global climate change, global water governance, biodiversity and conversation, marine environmental protection, deforestation, biotechnology and biosafety, global chemicals politics and policy.
- Second part, *on concepts and approaches*, introduced major conceptual and theoretical approaches in study of global climate and environment policy. That included the role of global environment, the changing nature of global governance, the concept of global environmental security, developments in international environmental law, discussions surrounding green growth and sustainable consumption.
- Third part, *on global actor*, institutions, and processes, in this part covered the role of nation-state and international society, NGOs and transnational environment activism, business actors, international regimes and their effectiveness, international environmental negotiations, regional environmental governance, and the debate surrounding United Nations reform.
- Fourth part, *on global economy and policy*, that considered the links between global policy on climate change and environment, and major economic trends, institutions, and policy approaches on the other.