



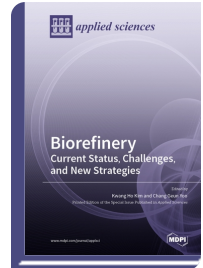
Special Issue Reprint

Biorefinery

www.mdpi.com/books/reprint/3974

Edited by
Chang Geun Yoo
Kwang Ho Kim

ISBN 978-3-0365-1510-6 (Hardback)
ISBN 978-3-0365-1509-0 (PDF)



Renewable fuels and chemicals derived from lignocellulosic biomass offer unprecedented opportunities for replacing fossil fuel derivatives, reducing our overdependence on imported oil, and mitigating current climate change trends. Despite technical developments and considerable efforts, breakthrough technologies are still required to overcome hurdles in developing sustainable biorefineries. In recent years, new biorefinery concepts including a lignin-first approach and a closed-loop biorefinery have been introduced to tackle techno-economic challenges. Furthermore, researchers have advanced the development of new technologies which enable the utilization of biomass components for sustainable materials. It is now apparent that advanced processes are essential for ensuring the success of future biorefineries. This book presents processes for biomass fractionation, lignin valorization, and sugar conversion or introduces new bioproducts (chemicals and materials) from renewable resources, addressing the current status, technical/techno-economic challenges, and new strategies.



Order Your Print Copy
You can order print copies at
www.mdpi.com/books/reprint/3974

MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).



Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.