

Special Issue

Lignocellulosic Biomass Catalysis

Message from the Guest Editors

Renewable resources play a predominant role in our future economy. The conversion of highly heterogeneous lignocellulosic matrices relies on a cascade of transformation steps, amongst which the preliminary one, called “pretreatment”, is crucial. This pretreatment allows the cracking of lignocellulosic biomass into its major components. Both the efficiency and selectivity of this pretreatment can be modulated by the addition of specific catalysts: thermo-stable and/or oxophilic, homogeneous or heterogeneous. The suitable selection of a specific catalyst is a key factor in order to convert lignocellulosic biomasses into targeted intermediates; platform chemicals or energy vectors. We encourage scientists working on biomass conversion to contribute to this Special Issue with original research or review articles covering the fundamental study of the role of catalysts in the conversion of lignocellulosic biomass. We propose an overview of the main “catalytic initiatives” all over the world. *Keywords:* renewable resources; lignocellulose; biofuels; bioplastics; catalysts; chemical catalysts; thermochemical conversions; platform chemicals

Guest Editors

Prof. Aurore Richel

Laboratory of Biomass and Green Technologies, University of Liege, Liege, Belgium

Prof. Dr. Chiaki Ogino

Department of Chemical Science and Engineering, Graduate School of Engineering, Kobe University, Rokkoudai-Chou 1-1, Nada, Kobe 657-8501, Japan

Deadline for manuscript submissions

closed (1 November 2019)



Biomolecules

an Open Access Journal
by MDPI

Impact Factor 4.8
CiteScore 9.2
Indexed in PubMed



mdpi.com/si/22961

Biomolecules
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
biomolecules@mdpi.com

[mdpi.com/journal/
biomolecules](https://mdpi.com/journal/biomolecules)





Biomolecules

an Open Access Journal
by MDPI

Impact Factor 4.8
CiteScore 9.2
Indexed in PubMed



[mdpi.com/journal/
biomolecules](https://mdpi.com/journal/biomolecules)



About the Journal

Message from the Editorial Board

Biomolecules is a multidisciplinary open-access journal that reports on all aspects of research related to biogenic substances, from small molecules to complex polymers. We invite manuscripts of high scientific quality that pertain to the diverse aspects relevant to organic molecules, irrespective of the biological question or methodology. We aim for a competent, fair peer review and rapid publication. Please look at some of the exciting work that has been published in *Biomolecules* so far. We would be delighted to welcome you as one of our authors.

Editors-in-Chief

Prof. Dr. Peter E. Nielsen

Department of Cellular and Molecular Medicine, Faculty of Health and Medical Sciences, University of Copenhagen, Blegdamsvej 3C, DK-2200 Copenhagen, Denmark

Prof. Dr. Lukasz Kurgan

Department of Computer Science, Virginia Commonwealth University, Richmond, VA 23284, USA

Author Benefits

Open Access

– free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Embase, CAPIus / SciFinder, and other databases.

Journal Rank:

JCR - Q1 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Biochemistry)