Special Issue

Conversion and Gasification of Gaseous, Liquid and Solid Organic Wastes

Message from the Guest Editors

Modern society is faced with the problem of clean processing/utilization of gaseous, liquid and solid organic wastes, such as associated petroleum and pyrolysis gas, aqueous effluents of industries, municipal liquid/solid wastes and sewage sludge. Thermal processing of these materials is considered the most suitable solution due to its relatively low environmental impact and partial recovery of energy and material resources. Available technologies of thermal processing are based on combustion/incineration, conversion/pyrolysis, and gasification, as well as on their combinations. Combustion of wastes results in the formation of airborne gaseous pollutants, such as polyaromatic hydrocarbons, NOx, SOx, HCl, furans, dioxins, as well as organic and inorganic aerosol particulate, fly ash, ashes, etc. Conversion, pyrolysis, and gasification of wastes can potentially reduce the production of various pollutants due to the absence or reduced amount of oxygen. The objective of this Special Issue of Waste is to provide a collection of scientific papers focusing on recent progress in conversion, pyrolysis, and gasification of gaseous, liquid, and solid organic wastes.

Guest Editors

Prof. Dr. Sergey M. Frolov

Semenov Federal Research Center for Chemical Physics of the Russian Academy of Sciences (FRC), Moscow 119991, Russia

Prof. Dr. Vladimir S. Arutyunov

N.N. Semenov Federal Research Center for Chemical Physics, Russian Academy of Sciences, Moscow, Russia

Deadline for manuscript submissions

closed (31 October 2023)



Waste

an Open Access Journal by MDPI



mdpi.com/si/134107

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

mdpi.com/journal/ waste





Waste

an Open Access Journal by MDPI



About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Prof. Dr. Catherine N. Mulligan

Department of Building, Civil and Environment Engineering, Concordia University, 1455 de Maisonneuve Blvd. W., Montreal, QC H3G 1M8, Canada

Author Benefits

Open Access:

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

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 30.5 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).

Recognition of Reviewers:

APC discount vouchers, optional signed peer review, and reviewer names published annually in the journal.

