



Polymer Materials for Agricultural Application

Guest Editors:

Dr. Florin Oancea

1. Bioresources Department,
Bioproducts Group, National
Institute for Research and
Development in Chemistry and
Petrochemistry, ICECHIM,
Bucharest, Romania
2. Biotechnologies Faculty,
University of Agriculture and
Veterinary Medicine, Bucharest,
Romania

Dr. Diana Constantinescu- Aruxandei

National Institute for Research &
Development in Chemistry and
Petrochemistry–ICECHIM, 060021
Bucharest, Romania

Deadline for manuscript
submissions:

closed (30 June 2022)

Message from the Guest Editors

Polymers contribute to the sustainable intensification of agricultural production. (Bio)polymers are active ingredients and/or enhancers of plant biostimulants and plant protection products. Seeds often require and benefit from film-forming polymers for enhanced protection and better germination. Polymeric films are used also to control postharvest diseases and to extend shelf life of fruits and vegetables. New generation of controlled released fertilizers relies on biodegradable polymer coatings. Biodegradable plastic mulch and/or water-holding polymers buffer soil temperature, prevent moisture loss, and increase crop water use efficiency. Formulations based on responsive polymers improve the efficacy and selectivity of agrochemicals and limit their negative impacts. The precise application of these polymer-based products to sustainable agricultural systems is supported by newly developed polymer-based agricultural sensors.

This Special Issue is intended to bring together research papers, communications, and review articles covering topics related to the development and application of polymers for crop management.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Alexander Böker

Lehrstuhl für Polymermaterialien
und Polymertechnologie,
University of Potsdam, 14476
Potsdam-Golm, Germany

Message from the Editor-in-Chief

Since its foundation in 2009, *Polymers* has developed into an internationally renowned, extremely successful open access journal. The editorial team and the editorial board dedicatedly combine open-access publishing and high-quality rigorous peer reviewing. The performance of the journal has proven this strategy to be well-suited and highly successful. This is reflected in the increasing impact factor of *Polymers*, the most recent one being 5.0.

I would like to invite you to contribute to the success of the journal by sending us your high quality research papers. We would be pleased to welcome you as one of our authors.

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), Ei Compendex, PubMed, PMC, FSTA, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank: JCR - Q1 (*Polymer Science*) / CiteScore - Q1 (*Polymers and Plastics*)

Contact Us

Polymers Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/polymers
polymers@mdpi.com
[X@Polymers_MDPI](https://twitter.com/Polymers_MDPI)