



Recent Advances in Polymer-Based Drug Delivery Systems

Guest Editors:

Dr. Ling Ding

Clinical Pharmacology
Laboratory, Department of
Pharmacy Practice and Science,
University of Nebraska Medical
Center, Omaha, NE 68198, USA

Dr. Huizhen Jia

School of Materials Science and
Engineering, Tianjin Key
Laboratory of Composite and
Functional Materials, Tianjin
University, Tianjin, China

Deadline for manuscript
submissions:

25 August 2024

Message from the Guest Editors

Novel delivery platforms based on natural and synthetic polymers have shown great therapeutic potential for the treatment of different kinds of diseases. Polymers can realize the efficient delivery and controlled release of cargo through physical adsorption, chemical conjunction, and/or internal loading. Notably, polymers with biodegradability, biocompatibility, and physicochemical stability are considered to be ideal delivery carriers. For example, the surface coating of a polymer with polyethylene glycol (PEG) improves water solubility and blood circulation; the conjugation of a polymer with specific markers/antibodies helps control drug distribution/targeting delivery in cancer specifically; some polymeric nanoparticles can cross the blood–brain barrier or improve drug resistance, etc. Polymer drug carriers should be nontoxic and non-immunogenic, which provides a safe framework to deliver therapeutic drugs without harm to the body. Biodegradable and bio-absorbable polymers are a promising choice for delivery systems.

This Special Issue is focused on the latest development of novel delivery platforms based on natural and synthetic polymers.





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)