Special Issue

Stimuli-Responsive Polymers: Current Advances and Future Perspectives

Message from the Guest Editor

With the advent of smart stimuli-responsive polymers, nowadays, it is possible to develop materials which simulate biological intelligence observed in nature. In particular, stimuli-responsive drug delivery (SRDDS) systems that allow the delivery of conventional drugs in spatial-, temporal- and dosage-controlled fashions have become a research hotspot in recent years. The stimuli can be from an external source such as light, near IR, ultrasound, X-ray and magnetic field or internal triggers such as heat, pH, oxidative stress and enzymatic reactions. Nevertheless, it still faces several major challenges such as chronic toxicities, long-term stability, biodistribution and selectivity and targeting efficacy in vivo. Hence, the current research topic aims to cover the recent developments of SRDDS and barriers which hurdles their clinical application. In general, the scope of the current research topic involves the pathophysiology of some of the disease and biological conditions that can be used as stimuli for targeting, smart and responsive biomaterials, current developments of SRDDS, and limitations of the currently available systems.

Guest Editor

Dr. Houman Alimoradi
School of Biomedical Sciences, University of Otago, Hercus Rm 339, 270 Great King St, 9016 Dunedin, New Zealand

Deadline for manuscript submissions

closed (30 November 2021)

Polymers

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed

mdpi.com/si/86039

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

mdpi.com/journal/polymers

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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 4.7.

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.

Editor-in-Chief

Prof. Dr. Alexander Böker
Lehrstuhl für Polymermaterialien und Polymertechnologie, University of Potsdam, 14476 Potsdam-Golm, Germany

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