

## Special Issue

# Smart Polymer: New Design and Applications

### Message from the Guest Editor

Exploring advanced materials, smart polymers stand out for their stimuli-responsive properties (pH, temperature, light, magnetic fields), driving innovations in biomedical engineering, electronics, and sustainability. Unlike traditional polymers, they enable complex functions like self-healing, shape memory, and controlled drug release, addressing limitations in conventional materials. To highlight recent breakthroughs, we announce a Special Issue on "Smart Polymer: New Design and Applications," inviting global contributions.

Key focus areas include:

- Design/synthesis of stimuli-responsive polymers
- Mechanistic characterization of responsive behavior
- Development of smart interfaces/surfaces
- Switchable adhesives and practical applications
- Biomedical devices, drug delivery, sensors, actuators
- Advanced fabrication (3D printing, electrospinning, film casting)

Submissions are welcome on thermo/pH/light/electrically responsive polymers, hybrid systems, nanocomposites, and theoretical/experimental studies of responsive behavior. We prioritize novel design strategies, fundamental mechanism elucidation, and groundbreaking applications that push material boundaries.

### Guest Editor

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### Deadline for manuscript submissions

31 January 2026



## Polymers

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## About the Journal

### 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 4.9.

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.

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### Editor-in-Chief

Prof. Dr. Alexander Böker

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