



Polymer Microgels: Synthesis and Application

Guest Editor:

Dr. Roberta Angelini

Istituto dei Sistemi Complessi del
Consiglio Nazionale delle
Ricerche (ISC-CNR), Sede
Sapienza, 00185 Roma, Italy

Deadline for manuscript
submissions:

closed (31 December 2021)

Message from the Guest Editor

Polymer microgels have attracted great attention in fundamental studies as good model systems for understanding the intriguing behaviors of soft colloids thanks to their elastic and deformable particles that provide a very rich phenomenology. These cross-linked particles with nanometric to micrometric dimensions are characterized by many fascinating properties such as swelling, softness, and responsivity that depend on their macromolecular architecture and can be triggered during the synthesis process. Moreover, they are highly attractive systems for several technological applications due to their high sensitivity to external stimuli. Smart microgels have indeed many applications in the pharmaceuticals industries, in artificial organs, tissue engineering, agriculture, construction, and cosmetics.

This Special Issue focuses on experiments, simulation, synthesis methods, and applications of homopolymeric, interpenetrating polymer network (IPN), copolymerized, and core-shell microgels. The topics may include local structure, phase diagrams, interparticle interactions, and synthesis methods besides the manifold applications.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Alexander Böker

Fraunhofer-Institut für
Angewandte Polymerforschung,
Lehrstuhl für Polymermaterialien
und Polymertechnologie,
Universität Potsdam,
Geiselbergstraße 69, 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 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.

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 (General Chemistry)

Contact Us

Polymers Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/polymers
polymers@mdpi.com
X@Polymers_MDPI