



Polymeric Materials as Lubricant Additives

Guest Editors:

Dr. Lelia Cosimbescu

Pacific Northwest National
Laboratory, 902 Battelle Blvd.,
MSIN K2-44, Richland, WA 99354,
USA

Dr. Robert Erck

Experimental Operations Facility,
Argonne National Laboratory,
9700 S. Cass Ave, 212 D212
Lemont, IL 60439, USA

Deadline for manuscript
submissions:

closed (20 January 2022)

Message from the Guest Editors

Ubiquitous to many facets of our machines, lubricants are often underestimated and viewed as commodity products. Lubricants are one of the most critical elements to engine durability and lifetime, providing much sought-after fuel efficiency, yet they are unseen and long ignored. They are additized with many materials that maintain and perform specific functions, one of the main components being polymers.

This Special Issue has been launched to highlight the most recent advances in polymer design and synthesis, interaction within bulk base oil, interaction with other components, viscosity, shear stability, film forming properties, tribology, surface interaction effects, molecular weight, mechanistic studies, and machine learning, to achieve a fundamental understanding of their operation. In addition, any work around green polymers (biobased or plastic-derived) is encouraged. Of interest are polymers utilized in fluid lubricants and greases; however, polymers for solid lubrication will also be considered. We hope that this Special Issue stimulates authors and readers, as much as the Editors.





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