



Polymer Gears, Mechanisms and Transmissions

Guest Editors:

Prof. Dr. Nikola Vukašinović

LECAD - Laboratory for
Engineering Design, Faculty of
Mechanical Engineering,
University of Ljubljana, 1000
Ljubljana, Slovenia

Dr. Borut Černe

LECAD - Laboratory for
Engineering Design, Faculty of
Mechanical Engineering,
University of Ljubljana, 1000
Ljubljana, Slovenia

Dr. Damijan Zorko

LECAD - Laboratory for
Engineering Design, Faculty of
Mechanical Engineering,
University of Ljubljana, 1000
Ljubljana, Slovenia

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Message from the Guest Editors

The purpose of this Special Issue is to present the most recent insights related to the engineering properties of various polymers' power transmission components, including all aspects of their behavior during production and operation. The scope of this Special Issue includes but is not limited to:

- Special applications in polymer power transmissions;
- Special applications in polymer micro gears, micro mechanisms, micro power transmissions;
- Design methods: load carrying capacity (new or improved models for fatigue, wear, and temperature prediction), design of non-involute gears, tooth shape optimization (tip relief, root fillet optimization);
- Manufacturing: 3D printing, advanced injection molding techniques (process parameters), injection-compression molding, etc.;
- Advanced materials: biopolymers, composites;
- Quality control: geometrical quality control (tactile and optical methods), void control (tomography), crystallinity;
- Advanced numerical studies of polymer power transmission systems;
- Novel experimental testing methods.





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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 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.

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Contact Us

Polymers Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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