# **Special Issue**

# High-Performance 3D Printing Polymers

### Message from the Guest Editors

Three-dimensional printing technology is commonly used in many fields. The multiple polymers based on different 3D printing technic demonstrate diversified and anisotropic material behavior, such as fused deposition modeling, which produces the part with the melting material: or the stereo-lithography apparatus method, which uses UV irradiation to cure liquid resin. The process method of 3D printers, i.e., the forming temperature, layer thickness, build direction, density, infill pattern, etc., affects not only the combination of polymer chains and the bond strength of different fibers but also the manufacturing efficiency and mechanical and thermal properties of the printed material. With the aim of comprehending the effect of the 3D printing process method to the material nature, this Special Issue of *Polymers* invites scholars' contributions on multiple aspects, including formulations and experimental analyses to discuss the mechanical, phase and chemical behavior of 3D-printed polymers and polymer composites in different fields, such as traditional manufacturing, aerospace, and biological or medical applications.

### **Guest Editors**

#### Prof. Dr. Minghsien Hsueh

Department of Industrical Engineering and Management, Natioinal Kaoshiung University of Science and Technology, Kaoshiung City 807, Taiwan

#### Prof. Dr. Lavinia Cosmina Ardelean

Department of Technology of Materials and Devices in Dental Medicine, "Victor Babes" University of Medicine and Pharmacy, Timisoara, Romania

### Deadline for manuscript submissions

closed (25 November 2023)



# **Polymers**

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.7 Indexed in PubMed



mdpi.com/si/101747

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

#### mdpi.com/journal/

polymers





# Polymers

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.7 Indexed in PubMed



polymers



# 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 4.7.

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

## **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 )