# **Special Issue**

# Advancements in Fused Deposition Modeling 3D Printing of Polymers: Material Properties and Thermal Behavior

# Message from the Guest Editors

This Special Issue aims to compile cutting-edge research on the development, characterization, and optimization of polymer materials used in FDM 3D printing. We invite the submission of original research articles and reviews that explore polymer behavior during and after the printing process, including thermal transitions, crystallization, thermal conductivity, and heat-induced degradation. Topics of interest include but are not limited to material formulation and modification. the modeling of thermal behavior, process-structureproperty relationships, multi-material and functional printing, and post-processing techniques used to enhance mechanical or thermal performance. This Special Issue will serve as a platform for researchers, engineers, and industry professionals to share insights that will drive the next generation of polymer FDM applications. Contributions that combine experimental work with simulation or offer multidisciplinary perspectives are especially encouraged.

## **Guest Editors**

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## Deadline for manuscript submissions

20 December 2025



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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

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