



Computational Modeling of Polymers

Guest Editors:

Dr. Riccardo Concu

Department of Chemistry and
Biochemistry, Faculty of
Sciences, University of Porto,
4169-007 Porto, Portugal

Dr. Michael González-Durruthy

Science and Technology Park,
University of Porto, 4169-007
Porto, Portugal

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Message from the Guest Editors

Development of new and innovative polymers is a challenging task. Classical approaches are time and money consuming and should be replaced by computational methodologies that allow a fast and accurate development of innovative materials. Computational modelling has been emerging as alternative approaches and nowadays is indispensable to assist experiments while developing new polymers. In addition, computational methodologies can also help to study and defining mechanical and physical properties of polymers. In this contests, quantum-mechanical calculations, all-atomistic and coarse-grained molecular dynamics simulations and elastic network models, have become a powerful tool for analysing complex physical phenomena, i.e., bond vibrations, diffusion, and rheology of polymeric materials.

The main aim of this special issue is to investigate more recent computational approaches used to develop and study polymers. This special issue will provide an opportunity for scientists, engineers and practitioners to present their more relevant studies and findings in this area.





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Editor-in-Chief

Prof. Dr. Alexander Böker

Lehrstuhl für Polymermaterialien
und Polymertechnologie,
University of Potsdam, 14476
Potsdam-Golm, Germany

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Polymers Editorial Office
MDPI, Grosspeteranlage 5
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