



## Elastomers: From Theory to Applications

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Deadline for manuscript  
submissions:

**closed (25 October 2020)**

### Message from the Guest Editors

This Special Issue focuses on the current state-of-the-art of elastomers, both in modern applications and from a theoretical perspective. The main characteristic of elastomer materials is the high elongation and (entropy) elasticity of these materials, and the ability to swell multiple times in a suitable solvent. The use of filled elastomers, especially of new kinds of elastomer nanocomposites, is of high interest for rubber technologies.

The scope of the Special Issue encompasses frontier-of-science contributions in synthesis, characterization, modeling, and the theory of elastomers. Of particular interest are new structures and functionalities incorporated into elastomers, leading to enhanced properties of crosslinked elastomeric materials. Examples include conductive elastomers, mechanically adaptive elastomers, bioelastomers, photosensitive and light-controlled elastomers, elastomers with autonomous self-healing properties, and other novel elastomer-based materials.





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