Special Issue

Aging of Polymeric Materials and Structures

Message from the Guest Editor

During their lifetime, polymers and polymeric composites suffer as a result of different working conditions that highly affect their behavior. Polymers are extremely sensitive to heat, oxygen, sunlight, the ozone, ionizing radiation, moisture, and similar conditions that cause the degradation of the mechanical properties of the material and its structure. These factors, individually or combined, result in the chemical transformations of molecules, which lead to the degradation of the macromolecules and cross linking. The current Special Issue aims to collect varying contributions concerned with the aging effect on the polymeric materials and structures, including composites under different loading conditions (both experimental and modeling). Aging causes the deterioration of the mechanical characteristics of polymers and surface crack growth that sometimes result in catastrophic failure. The current Special Issue aims to determine and explore the different failure mechanisms associated with the different aging conditions, in relation to both the material and structure levels.

Guest Editor

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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
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