

Special Issue

Advances in Rubber Composites and Recovered Waste Rubber

Message from the Guest Editor

Rubbers are versatile materials prized for elasticity. Used ubiquitously, they are complex composites containing rubber, fillers, softeners, anti-degradants, and curing agents. Fillers are essential, impacting processing and properties. Beyond traditional options like carbon black and silica, research focuses on fillers imparting specific characteristics, such as thermal/electrical conductivity, magnetic properties and EMI shielding. These include carbon-based materials and inorganics. Growing rubber product demand causes significant waste accumulation, posing environmental and socio-economic threats. Thus, efficient waste rubber valorization and recycling technologies are crucial. Current trends also favor biodegradable or eco-friendly materials. One sustainable approach is utilizing non-traditional, renewable resource-derived fillers/additives and recovered waste rubber compounds. Incorporating these natural materials or modified waste rubber enables higher-value composites with ecological and economic benefits. This Special Issue covers rubber compounds/composites, smart materials, green materials, fillers, additives, waste rubber utilization, and recycling.

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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 4.9.

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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