Special Issue

Functional Polymer Coatings for Energy and Environmental Solutions

Message from the Guest Editor

Polymer coatings have shown tremendous potential as functional coatings in applications such as supercapacitors, wastewater treatment, and corrosion prevention. These coatings offer adjustable properties, including electrical conductivity, chemical resistance, and mechanical flexibility. In supercapacitor applications, polymer coatings enhance energy storage performance by improving the electrode–electrolyte interface, leading to increased charge storage capacity and electrochemical stability. Researchers have achieved significant improvements by optimizing the polymer composition and structure. Polymer coatings have also demonstrated promise in wastewater treatment by acting as selective barriers for efficient separation and removal of contaminants. Tailoring the coatings allows selective adsorption of specific pollutants, such as heavy metals, organic compounds, or microorganisms, resulting in improved water quality and reduced environmental impact. For corrosion prevention, polymer coatings form protective barriers on metal surfaces, preventing the penetration of corrosive agents such as moisture and chemicals.

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

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