

Functionalities of Polymer-Based Nanocomposite Films and Coatings

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

This Special Issue concentrates on the current development of polymer-based nanocomposite films and coatings, to provide an overview involves the interrelationship between processing, structure, properties, and performance. Nanocomposite films and coatings, materials composed of at least two immiscible phases at the nanometer scale, can provide a cost-efficient route to obtain innovative materials with superior functionalities.

The current hot topics that will be covered in this Special Issue include but are not limited to the following:

- Theoretical and experimental research, knowledge and new ideas in polymer-based nanocomposite films and coatings;
- Preparation and characterization of nanocomposite films;
- The recent development of the functionalities of nanocomposite films;
- Computer modeling and simulation to predict coating properties;
- Understanding the degradation mechanisms of coatings;
- Recent trends in thin-film synthesis techniques.

We look forward to both original research papers and review articles for the aforementioned topics that will contribute to the multidisciplinary domains of novel coatings.

Special Issue



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Message from the Editorial Board

Now more than ever, research is called for to produce technologies and improve knowledge to solve the major challenges faced by our society. The development of new materials and devices for (without the ambition to be exhaustive) energy, health and food technology, together with the need for establishing processes that reduce the impact on critical resources and the environment, is indeed at the center of most contemporary research. Surface science and engineering play a key role in this regard. Refining surfaces and their modifications provides new materials, architectures and processes with a huge potential to aid most societal challenges. *Coatings* is a well-established, peer-reviewed, online journal that

focuses on the dissemination of applications in the field of surface science and engineering. *Coatings* publishes original, research articles that report cutting-edge results and review papers on the hottest topics.

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