Special Issue

Functionalities of Polymer-Based Nanocomposite Films and Coatings

Message from the Guest Editor

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.

Guest Editor

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Deadline for manuscript submissions

closed (30 June 2024)



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Message from the Editorial Board

Now more than ever, research is asked to deliver knowledge and technologies 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 in the spotlight of most contemporary research. Surface science and engineering play a key role in this regard, with an incredible potential in delivering new and deep scientific understanding and technical solutions essential to solve most of the major societal challenges.

Coatings is a well-established, peerreviewed, online journal dedicated to the vibrant field of surface science and engineering. Coatings publishes original research articles that report cutting-edge results and review papers that make the point on the hottest research topics.

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