

Special Issue

Recent Advances in Conducting Polymer Films and Coatings: Applications in Optoelectronics, Solar Cells, Electrochromics, and Biosensors

Message from the Guest Editors

Conducting polymers (CPs) are a class of polymers with innate electrical conductivity coupled with exceptional electrical and mechanical properties. With their low cost, low density, mechanical flexibility, and ease of processing, conjugated polymers are promising for electronic applications, electro-optical and -chemical applications. Finding new, essential lines of inquiry in this research area requires novel polymer synthesis methods, chiral-based systems, and streamlined device fabrication strategies. Additionally, using peptide modifications in organic materials offers a new viable strategy to enhance their biocompatibility and promote bioreceptor targeting behavior. The combination of peptides with conducting polymers (CPs) has gained considerable attention in this regard.

- Conducting polymers;
- Novel methods of their synthesis and development;
- The theoretical and computational modeling of the properties of conducting polymers;
- Characterization techniques for their electronic applications;
- Chiral polymer photonics;
- Chiral sidechain or peptide-integrated conducting polymers;

We look forward to receiving your contributions.

Guest Editors

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Deadline for manuscript submissions

closed (31 July 2025)



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About the Journal

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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