Special Issue

Liquid–Solid Interfaces in Environmental Research

Message from the Guest Editor

Liquid–solid interfaces are crucial in daily life, from food and household products to energy storage, industrial fluids, and environmental systems. These interfaces are central to understanding wetting and wettability, where multiphasic interactions demand a multidisciplinary approach. This Special Issue focuses on the role of liquid–solid interfacial properties in environmental applications involving coatings and materials exposed to outdoor conditions, including solar panels, marine environments, oil recovery, pollution control, cultural heritage conservation, deicing, and biomedical uses like antimicrobial protection. We aim to highlight how environmental conditions affect material performance through interfacial phenomena.

Topics of interest include, but are not limited to, the following:

- Environmental liquid–solid interfacial studies;
- Adsorption phenomena and kinetics;
- Surface modification and functionalization;
- Thin-film and coating growth mechanisms;
- Applications in environmental remediation and sustainability.

Contributions using innovative experimental, theoretical, or computational methods are highly encouraged.

Guest Editor

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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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