

Special Issue

Tribomechanical and Corrosion Tests for Advanced Surface Characterization

Message from the Guest Editor

The advances in thin coatings seen in recent years, as well as the design of coating structures, make it necessary to make an effort to research new strategies for tribomechanical characterization and corrosion resistance. On the other hand, the demand for new functionalities, and in some cases multifunctionalities for the coatings, reinforces the need to develop specific characterization strategies. This Special Issue aims to promote aspects related to nanoindentation, scratching, friction and wear tests, as well as corrosion resistance of thin layers or surface modifications and the use of artificial intelligence and computational methods for the design of coatings and tailored surface treatments.

- Advanced surface characterization techniques;
- Development and new applications of nanostructured coatings using PVD, CVD, and plasma spraying techniques;
- Coatings resistant to high temperatures and oxidation, with special attention given to energy and chemical applications;
- Applications and new developments of nanostructured coatings for tribological applications.

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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