

Advanced Corrosion Protection through Coatings and Surface Rebuilding

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Message from the Guest Editors

Dear Colleagues,

We are delighted to invite you to contribute original works to this Special Issue. Contributions should focus on the fundamentals and applications of corrosion protection through coatings and surface rebuilding.

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

- Novel ideas in the mechanisms of corrosion protective and preventive coatings using experimental, simulation, and theoretical analysis.
- Recent advances in sustainable coatings, smart coatings, organic coatings, hybrid coatings, and graded coatings.
- Recent advances in test methodologies that take into account mechanical, chemical, and electrochemical interactions, as well as the capacity to estimate the performance of coatings and surface rebuilding.
- Understanding the mechanisms of coating degradation caused by corrosion, wear, or other dynamic loading situations.
- Trendy materials, applications, and manufacturing techniques for coatings and surface rebuilding.
- Characteristics evaluation of corrosion-resistant coatings and nanostructured composite coatings.
- Environmental effects of coatings and surface rebuilding produced by various methods.



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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 publications 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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