

Special Issue

Development of Smart and Multifunctional Anticorrosion Coating Technologies

Message from the Guest Editors

Functional coatings, such as self-healing coatings, superhydrophobic coatings, high-performance inhibiting coatings, and conducting polymer coatings, represent a series of new and highly promising anticorrosion coatings. These coatings demonstrate potential for the enhancement of corrosion resistance, as well as the ability to extend the lifespan of materials. Specific topics of interest include, but are not limited to:

- The design and fabrication of novel functional coatings, and the discussion of their fabrication processes and strategies for performance modulation
- Evaluation methods and standards for the performance of functional coatings, including corrosion resistance, high-temperature resistance, wear resistance
- Advances in the mechanical stability testing of functional coatings and the validation of innovative testing methods
- Revealing the anticorrosion mechanisms of functional coatings through experimental research, simulation, and theoretical analysis
- The applications and prospects of functional coatings in various fields, such as aerospace, automotives, marine engineering

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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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