



Advanced Corrosion and High Temperature Protection through Surface Modification and Coatings

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Deadline for manuscript submissions:

closed (30 November 2023)

Message from the Guest Editors

Dear Colleagues,

This Special Issue is not limited to but intends to receive papers related to coating methods with mechanisms that act to promote improved behaviour at corrosion or high temperature oxidation:

- Biomaterials: the field related to complex environments uses materials which are submitted to (bio)corrosion and wear. In these conditions, different surface modification methods are applied to confer corrosion protection and biocompatibility.
- Aeronautics/Aerospace: the study of thermal barrier coatings is a field that presents interesting perspectives with high entropy coating (alloys) and additive manufacturing.
- Oil and gas: bio-inspired coatings, self-healing, polymeric and composite-based coatings have all been recently employed to avoid corrosion in the petroleum extraction; the acting mechanisms are still under investigation.
- Modelling/experimental papers that address the potential of computational tools in this field are also welcome.

We look forward to receiving your contributions.





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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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