

Functional Surfaces with Anti-icing Properties

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Message from the Guest Editors

Over recent years, multiple studies have been initiated on innovative surface engineering techniques to tackle the ice-related issues encountered in industrial applications. Surface engineering, surface texturing, coatings, etc., are promising techniques to functionalize surfaces with efficient passive/active anti-icing properties. Surface functionalization mainly aims to prevent/reduce ice accretion and/or its adhesion to various critical surfaces; however, it can be used in combination with other active ice protection systems (thermal, mechanical, etc.) to reduce their power consumption further and enhance their performance.

This Special Issue aims to gather the latest innovations in the field, regarding the following:

- Anti-icing/de-icing coating development;
- Anti-icing/de-icing coating characterization testing;
- Durability in winter conditions;
- Laboratory ice sample generation;
- Ice adhesion measurement;
- Coating application to substrate;
- Icephobicity, super/hydrophobicity.

In this Special Issue, original research articles and reviews are 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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