



Materials with and without Coating—New Perspectives

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Message from the Guest Editors

Dear Colleagues,

Corrosion, generally defined as a degradation of a material or its properties, by chemical reaction with the environment, currently affects all areas of the economy, from the integrated circuits to the reinforced concrete bridges, concerning a wide spectrum of industries. Today, the concept of corrosion has evolved in the broad sense of the word, being not limited to metals, but affecting polymers and ceramics as well. The corrosion resistance can be considered a vital property for biomaterial components and it is associated with the problem of metallic ion release, potentially harmful for the organism. Therefore, reconsidering the toxicology assessment of devices in all types of environments (body, home) has become necessary.

In this Special Issue, we welcome original research papers and reviews focused on the complex relationships between the material, its environment, and corrosion behavior of metallic/nonmetallic materials as well as possibilities for increasing the corrosion resistance by means of surface modification and application of protective coatings.

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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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