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Innovative Technologies and Materials for the Production of Mechanical, Thermal and Corrosion Wear-Resistant Surface Layers and Coatings

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Message from the Guest Editors

Dear Colleagues,

Surface deterioration is a very real problem in many industries. During the wear process, the surface layer of material is degraded and damaged by mechanical, high temperature, or chemical reaction between the worn element and other elements or aggressive environments. Surfacing, coating, cladding, thermal spraying, galvanization processes with specialized welding filler materials are used to replace worn metal with metal that can provide more satisfactory wear resistance than the original. It is wise to consider a combination of factors that create the wear problem to make a decision regarding selection of surfacing, plating, spraying, or galvanizing alloy. Wear prediction proves to be difficult due not only to the dependence on material and design properties but also on difficulties in the quantification and control of tribological systems during the lifetime.

The purpose of this Special Issue is to present the latest developments in the field of research on innovative technologies and materials to produce surface layers and coatings resistant to mechanical wear, thermal wear, and corrosion.

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Message from the Editor-in-Chief

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