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# Heat and Surface Treatments of Metallic Materials and Their Welded Joints

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Deadline for manuscript submissions: closed (30 November 2022)



Dear Colleagues,

The properties of an element's surface strongly affect its behavior during cyclic loading and operating in an aggressive environment or highly abrasive conditions. In many cases, it is the quality of a surface that determines a failure, which can be avoided by its appropriate modification. The industry of the XXI century provides a large arsenal of surface treatments, including machining, chemical treatment, thermal spraying, peening, hardfacing, and many others. Additionally, considering the metallic materials, their welded joints are often the weakest point of construction, and the battle for their quality decides a loadcarrier capability of an entire structure. The aim of this Special Issue is to publish original reviews and research articles from a wide range of research fields involving heat treatment, surface treatment, and post-processing of metallic materials and their welded joints.

It is our great honor to invite you to submit a manuscript for this Special Issue that provides an excellent opportunity for those who are working within these fields, paving the way for the further advancement of technical civilization.



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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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