Special Issue

Advancement in Heat Treatment and Surface Modification for Metals

Message from the Guest Editors

Surface modification is necessary to meet the required specifications for the majority of metal components. Chemical heat treatment of metals is a kind of surface modification technology for modifying both the chemical composition and microstructure of the surface layer, and thus makes the properties of the surface layer different from those of the matrix to meet the different requirements in different zones of the metal components, such as wear, oxidation or corrosion resistance, toughness, etc. This Special Issue on "Advancement in Chemical Heat Treatment for Metals" in Coatings invites front-line researchers to submit original research and review articles on various aspects in the field of the novel chemical heat treatment of metals. The advancement of chemical heat treatment is to provide better combined properties or higher efficiency. 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 advancements in chemical heat treatment for metals.

Guest Editors

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Deadline for manuscript submissions

closed (20 July 2025)



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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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