# Special Issue

## Recent Advances in the Tempering Process

### Message from the Guest Editor

The presence of fresh martensite is not desirable in the microstructure of steel. Whereas fresh martensite significantly increases the hardness and strength, other properties, such as low toughness and brittle fracture are markedly increased. Tempering is often conducted to increase the toughness of martensite and avoid the embrittlement phenomenon. The clarification of the contribution of tempering to the mechanical properties is vital for the optimization of the strength and ductility of steels to extend their service life. This Special Issue, entitled Recent Advances in the Tempering Process, is directed at revealing recent progress associated with tempering treatments. Furthermore, microstructural evolution, and the concurrent mechanisms by which it is enhanced by tempering treatment, is introduced.

### Guest Editor

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### Deadline for manuscript submissions

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# About the Journal

## Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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