

## Special Issue

# Modern Processing Routes for Metallic Alloys

### Message from the Guest Editors

In the face of rapidly evolving technological and environmental landscapes, the transformation of metallic materials has reached a pivotal moment. Traditional manufacturing and processing methods are increasingly being redefined by the integration of advanced technologies, particularly artificial intelligence (AI). Modern material transformation processes now require not only cutting-edge machinery and computational power but also seamless collaboration between human expertise and intelligent systems. This synergy between human insight and AI-driven tools is essential for optimizing efficiency, precision, and sustainability in metallic materials processing. From real-time process control to predictive modeling and adaptive decision-making, AI enables a level of responsiveness and innovation critical for addressing current and future challenges in the field. At the same time, human oversight ensures ethical considerations, contextual understanding, and creative problem-solving that machines alone cannot achieve. We welcome original research articles, reviews, and case studies that contribute to our shared understanding and the advancement of modern metal processing.

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### Guest Editors

Dr. Verona Biancardi Aguiar  
Prof. Dr. Ana María Camacho  
Dr. Álvaro Rodríguez-Prieto

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### Deadline for manuscript submissions

20 January 2027



## Applied Sciences

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### Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo  
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