



an Open Access Journal by MDPI

Product Development in Net-Shape Metal Powder Technologies

Guest Editors:

Prof. Dr. Ilaria Cristofolini

Department of Industrial Engineering, Universita degli Studi di Trento, 38123 Trento, Italy

Prof. Dr. Nora Lecis

Department of Mechanical Engineering, Politecnico di Milano, Milan, Italy

Prof. Dr. Vigilio Fontanari

Department of Industrial Engineering, University of Trento, Trento, Italy

Deadline for manuscript submissions: closed (30 April 2022)

Message from the Guest Editors

Dear Colleagues,

Metal powder net-shape and near net-shape technologies are increasingly generating interest, as they allow producing parts as close as possible to their final shape, eliminating or reducing secondary operations, and consequently reducing scrap, costs, time to market, and the environmental impact. Among them, press and sinter, metal injection molding, and recently, metal additive manufacturing are attractive to a huge market. Moreover, aiming at obtaining parts as close as possible to their final shape, dimensional and geometrical control is a crucial aspect to be considered in the design step. In addition, the parameters of the metallurgical process must be carefully defined, since they strongly affect the final microstructure and the onset of distortions, residual stresses and different types of localized or diffuse defects.

This Special Issue invites papers concerned with product development in net-shape and near net-shape metal powder technologies from different points of view, considering the whole life-cycle of the products, and the need for collaboratively evaluating the many different variables affecting the characteristics of the final product.



Specialsue





an Open Access Journal by MDPI

Editors-in-Chief

Prof. Dr. Hugo F. Lopez

Department of Materials Science and Engineering, College of Engineering & Applied Science, University of Wisconsin-Milwaukee, 3200 N. Cramer Street, Milwaukee, WI 53211, USA

Prof. Dr. Yong Zhang

Beijing Advanced Innovation Center of Materials Genome Engineering, State Key Laboratory for Advanced Metals and Materials, University of Science and Technology Beijing, 30 Xueyuan Road, Beijing 100083, China

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 metallurgical field the ranging from processing. and mechanical behavior. phase transitions microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions. **High Visibility:** indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases. **Journal Rank:** JCR - Q2 (*Metallurgy and Metallurgical Engineering*) / CiteScore - Q1 (Metals and Alloys)

Contact Us

Metals Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/metals metals@mdpi.com X@Metals_MDPI