



an Open Access Journal by MDPI

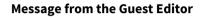
Composite Metal Pipes: Properties and Applications

Guest Editor:

Prof. Dr. António Bastos Pereira

Centre for Mechanical Technology and Automation, University of Aveiro, Campus Santiago, 3810-193 Aveiro, Portugal

Deadline for manuscript submissions: closed (31 January 2020)



A wide range of activity sectors, from systems for water supply to the aeronautics and space industries, currently used composites.

Composite pipes have many potential advantages over conventional pipes. The excellent mechanical properties, low specific weight, high specific stiffness, good thermal insulation and corrosion resistance form the basis of the increasing volume of applications.

Piping testing involves checking for tightness, durability, mechanical strength to pressure and other external stresses, as well as analysis of adhesion between the layers of the tube. On the other hand, the numerical simulation of pipe strength requires the properties of the constituent materials as well as the characteristics of the bond between the layers of the composite formed by the metal / plastic or metal / ceramic or other pairs.

This Special Issue presents: (i) Types of raw materials, including property enhancement additives such as nanomaterials for composite metal pipes manufacturing; (ii) Technologies for composite metal pipes manufacturing; (iii) Properties of composite metal pipes, including numerical modeling and simulation; and (iv) Applications.









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. mechanical behavior. phase transitions and 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 & Metallurgical Engineering*) / CiteScore - Q1 (*Metals and Alloys*)

Contact Us

Metals Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/metals metals@mdpi.com X@Metals_MDPI