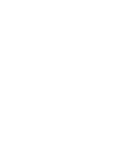




an Open Access Journal by MDPI

Thermal Spray Processes: The Evolution of Equipment, Technology and Feedstock

Guest Editors: Prof. Dr. Lech Pawlowski Prof. Dr. Andreas Killinger Dr. Filofteia-Laura Toma Deadline for manuscript submissions: closed (31 December 2018)





Message from the Guest Editors

Dear Colleagues,

Thermal spraying is one of most versatile technologies in coatings deposition. Its attractiveness results from its high efficiency of deposition of a broad range of materials, including ceramics, metals, and alloys. In the last few years, new emerging spray technologies, mainly cold spraying and thermal spraving with liquid feedstocks, have become of increasing interest. The torches used to spray use cold or warm gases accelerated in a De Laval nozzle; hot gases or plasmas being heated by gas combustion or by an electric arc. The evolutions in torches design include the ways of feedstock injection and methods of gas heating. The use of liquid feedstock, such as suspensions and solution precursors, enabled the achievement of new coating architectures and the achievement of promising mechanical or thermophysical properties. On the other hand, development of metal-cladded ceramic powders paves the way to obtain cermet coatings with the use of the cold spray technique.

The proposed Special Issue invites the authors of papers that are active in the development of these new thermal spray processes, as well as on the design of new concepts for feedstock







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