



New Technology of Welding/Joining of Metallic Materials

Guest Editors:

Prof. Dr. Jacek Mucha

Department of Mechanical Engineering, Faculty of Mechanical Engineering and Aeronautics, Rzeszów University of Technology, 35-959 Rzeszów, Poland

Dr. Waldemar Witkowski

Faculty of Mechanical Engineering and Aeronautics, Rzeszów University of Technology, 35-959 Rzeszów, Poland

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Message from the Guest Editors

The constant technical progress of construction led to the development of new construction materials. The use of traditional joining technologies does not always provide tangible benefits. Hence, numerous studies have been conducted to develop innovative solutions and improve the effectiveness of traditional joining methods that can be applied to join new materials. Welding is a fairly old and still commonly used joining technology in the construction, automotive, and aviation industries, among many other branches of industry. There are many other joining technologies for which permanent or separable joints can be obtained, such as: gluing, riveting, pressing, screwing, plastically forming, etc. For each of the joining processes, the structure and microstructure of the joined materials before and/or during joining alters. These changes may result from plastic deformation, heat treatment, etc.

For this Special Issue of *Metals*, we invite you to submit scientific manuscripts that will enable other scientists to gain new theoretical and practical knowledge in the field of joining technology using welding and other joining technologies for metallic materials.





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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 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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Metals Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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