



an Open Access Journal by MDPI

Advanced Welding and Soldering Technologies for Metals and Alloys

Guest Editor:

Dr. Marek Mróz

Department of Foundry and Welding, Faculty of Mechanical Engineering and Aeronautics, Rzeszow University of Technology, Al. Powstańców Warszawy 12, 35-959 Rzeszów, Poland

Deadline for manuscript submissions: **20 June 2024**

Message from the Guest Editor

Dear Colleagues,

The subject of this Special Issue oscillates around welding and soldering. In the case of the welding process, the subject of the work will be oriented to all welding methods (MMA, MIG/MAG, GTAW, SAW, PAW, LBW, EBW, and others) and thermal processes occurring during welding, as well as welding metallurgy in terms of the analysis of processes occurring in the liquid weld pool metal. The thematic area of this work also includes innovative research on joining difficult-to-weld materials compiled and welded structures, in particular thin-walled welded structures. The use of numerical and computer simulation of the welding process, for example in the aspect of analyzing temperature or stress distribution in the area of the welded joint, are topics covered by this work. The work will present new solutions in the field of soldering methods concerning fillers and fluxes used to produce unconventional soldered joints from various materials. We encourage you to publish research on the broadly understood minimization of defects in welded and soldered joints using innovative technological, material, and construction solutions.









an Open Access Journal by MDPI

Editor-in-Chief

Message from the Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy 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.

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 (*Engineering, Multidisciplinary*) / CiteScore - Q1 (*General Engineering*)

Contact Us

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