



Contemporary Progresses and Novel Techniques in Welding and Manufacturing of Metal Matrix Composites

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

Metal matrix composites (MMCs) are of great interest because they have improved features such as being lightweight and their strength, stiffness, wear resistance, creep resistance, and electrical and thermal conductivity. Vacuum brazing, ultrasound-assisted brazing, transient liquid phase bonding, laser welding, electron beam welding, metal inert gas welding, gas tungsten arc welding, or resistance spot welding are the most popular connecting procedures for MMCs. MMCs have recently been joined using a variety of solid-state joining processes, such as friction stir welding. Because of its superior qualities to conventional manufacturing procedures, various solid state techniques have been widely used to manufacture MMCs.

The goal of this Special Issue is to cover a wide range of subjects relating to MMC joining techniques, manufacturing, and characterization. The following are some of the themes of interest; however, they are not exhaustive:

Developments of welding and joining processes of MMCs;
Novel techniques in the manufacture of MMCs;
Modelling and simulation of welding and joining processes;
Heat source-material interaction mechanism.





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