Journal of
Composites Science

IMPACT FACTOR 3.0

CITESCORE 5.0

an Open Access Journal by MDPI

Surface Composites Produced by Friction Stir Processing

Guest Editor:

Dr. Józef Iwaszko
Faculty of Production Engineering and Materials Technology, Department of Materials Engineering, Czestochowa University of Technology, 42-201 Częstochowa, Poland

Deadline for manuscript submissions:
closed (31 March 2022)

Message from the Guest Editor

Friction stir processing (FSP) belongs to the solutions that in recent years have set new directions in the method of constituting surface layers for engineering materials. This technology makes it possible to not only make microstructural changes in the surface layer of the material but also produce a composite microstructure by introducing an additional phase in the form of particles or fibers into the modified zone.

The main purpose of this Special Issue is to collect the results of various investigations focused on the manufacturing of surface composites using FSP and the analysis of the effect of processing on the microstructure and properties of the surface layer. In the Special Issue, articles presenting new achievements and methodological solutions concerning the production of a composite microstructure in the surface layer of engineering materials as well as the shaping of the composite microstructure of the material, e.g., under intensive cooling, are welcome. The Special Issue is also dedicated to scientists who model and simulate the processes responsible for the formation of the composite microstructure during FSP and determining the properties of the composite.