

Editorial

Recent Advances in the Manufacturing of Polymeric Composites

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The current special issue focuses on reporting the latest advances achieved in the field of polymeric composite manufacturing. The addressed polymeric composites represent an advanced functional material being extensively utilized in various industries. This type of material shows higher specific mechanical properties and better structural functionalities compared with conventional alloys and steels. Polymeric composites are often fabricated by reinforcing fibres and polymer matrices, showing anisotropic behaviour and heterogeneous structure. Mechanical manufacturing, such as trimming, turning, and drilling, are essential operations to shape the composite specimens into desired quality and target dimensions. However, polymeric composites show very poor machinability owing to their inherent anisotropic behaviour. The manufacture of polymeric composites involves issues such as the design of the processing operations, the optimization of the machining parameters, the minimization of the manufacturing damage, the quantification of accuracy and quality, the monitoring of manufacturing outputs, and the control of tool wear.

This special issue aims to discuss the recent research challenges and achievements in manufacturing polymeric composites, covering both experimental and numerical investigations. Rigorous peer-review processes were

undertaken to ensure the academic quality of the published papers. It is hoped that the contributions collected in this special issue can provide useful information as a basis for a better understanding of the manufacturing science and technology of polymeric composites and may further aid the development of advanced manufacturing techniques for other engineering composites.

Conflicts of Interest

The guest editors declare that there are no conflicts of interest involved in this special issue.

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