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Fusion Bonding/Welding of Polymer Composites

Guest Editors:

Prof. Dr. Patricia Krawczak

IMT Nord Europe, Institut Mines Télécom, University of Lille, Centre for Materials and Processes, F-59653 Villeneuve d'Ascq, France

Dr. André Chateau Akué Asséko

Centre for Materials and Processes, IMT Lille-Douai, Institut Mines-Télécom, Douai, France

Prof. Dr. Chung-Hae Park

Centre for Materials and Processes, IMT Lille-Douai, Institut Mines-Télécom, Douai, France

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closed (20 October 2023)

Message from the Guest Editors

Dear Colleagues,

Joining of polymer composites may be achieved by different technologies. However, one of the greatest drivers for thermoplastic composites use is the ability to join components via fusion bonding/welding.

Although some methods like resistance or induction welding are quite well established, other technologies are still at a more or less advanced development stage. One of the challenges is to master the interfacial phenomena, structure and quality in the assembly area (welds). The same issues are also to tackle for 3D-printed or overmolded parts. Besides, there is a need for reliable predictive process simulation softwares, and also for increased inline monitoring and control of welding process parameters.

This Special Issue welcomes papers on the latest advances and development of fusion bonding/welding of thermoplastic composites. Suggested contributions may address materials, processing, modeling/simulation, monitoring/control, performance or application issues, with either experimental or numerical approches.

Dr. André Chateau Akué Asséko

Prof Dr Patricia Krawczak

Prof. Dr. Chung-Hae Park

Guest Editors











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Editor-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, OC H3A 0C7, Canada

Message from the Editor-in-Chief

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