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Preparation and Performance Study of Polymer-Based Textile Composites

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Deadline for manuscript submissions:

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Message from the Guest Editors

With the awareness of the importance of composite performance under a variety of conditions in relation to mechanical behaviours across scales, this Special Issue of Polymers invites contributions addressing several aspects of polymer-based textile composites in view of mechanics analyses under different processes, such as: interpreting the weaveability or braidability of fibres, especially for hard and brittle polymer fibres, capable of being utilized to manufacture near-shaped reinforcements; the study of mechanical behaviours on textile reinforcements during preforming processes, ranging from yarn to fabric scales (mesoscale and macroscale, respectively), in order to figure out how to optimize the preforming process, taking into consideration textile reinforcement properties; simulations based on a new modelling method to advance our knowledge of mechanical behaviours of textile reinforcements: the advanced structure of textile reinforcements and its relation to composite mechanical performance; research regarding the relationship between the polymer resin injection process and composite mechanical properties; etc.













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Message from the Editor-in-Chief

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