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Modeling of Damage in Composite Materials

Guest Editor:

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Message from the Guest Editor

Fiber-reinforced polymer (FRP) composite materials have many applications in industry and have been extensively investigated thanks to aeronautical developments in the last few decades. Modeling of damage in FRP is still a complex task keeping in view the heterogeneous nature of composite materials in addition to the multiscale nature of damage development and progression. This complexity is further augmented when predicting the damage under the application of multiaxial loading. Classical such examples are damages in the wear and fretting phenomena occurring in the contact zones of composite materials with other materials. In contrast to the experimental works on the wear of FRPs, very few studies have reported on modeling the damage mechanisms encountered in the wear process.

This Special Issue will focus on recent progresses on damage modeling concerning:

- New numerical approaches;
- New damage models or criteria;
- Wear of composite materials;
- Damage under multiaxial loading.













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Message from the Editor-in-Chief

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