

## **The Usage of Natural Fibers for Automotive Applications**

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### **Abstract**

Lightweighting studies of vehicles have gained great importance in recent years due to strict emission regulations and goals of more sustainable manufacturing. One of the solutions to produce lighter vehicles is to employ lighter alternative materials such as composites instead of conventional materials. Composite materials are generally fabricated with reinforcement of a matrix material with synthetic fibers such as glass, carbon and aramid, but recently there is a great interest on natural fibers to substitute the synthetic fibers with bio-based material which have the advantages of being green, biodegradable, renewable and more sustainable. Thus, especially for automotive components there are many studies to employ natural fibers instead of synthetic fibers. In this study, the recent studies on applications of natural fibers in automotive composites have been reviewed. The review study revealed that natural fibers are viable alternatives to synthetic ones and they are expected to be used more in near future. (The authors would like to thank the Cukurova University Scientific Research Project Coordination (FBA-2021-13485) for financial support to this project.)