

Nanocomposite Opportunities for Automotive Applications

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Abstract

This paper discusses the current use of nanotechnology in automotive applications and their technical requirements. It gives insight of market needs and proposed steps to achieve successful and meaningful commercialization. It describes the steps the industry should take to benefit from the promise of nanotechnology. It examines the challenges and opportunities for integrating nano-composites into automotive applications such as exterior, interior, electronic and under the hood. The criteria for selection of Nano-materials for appearance, semi-structural and structural parts are discussed to develop the most cost effective strategy. Automotive industry is under significant cost pressure and although the cost of Nano-composite has reduced but still it is high. So, the industry has to put the co-operative efforts to reduce overall system cost for a particular application.