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## **Title: Reinforcement Effect of Graphene on the Mechanical Properties of Epoxy**

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### ***Abstract***

Graphene has become one of the potential reinforcements for polymers because of its exceptional mechanical properties. The application of graphene nanocomposites in advanced engineering applications has attracted a lot of attention in recent years. It is considered that graphene could help to enhance the mechanical properties of epoxy at low loadings. Herein, the preparation and mechanical properties of epoxy/graphene nanocomposites has been researched in general, the results show that graphene has significant reinforcement effect on epoxy matrix, along with that, the mechanism of this reinforcement has been discussed as well, which gives guidelines for preparing advanced epoxy/graphene nanocomposites.

### ***Biography***

Jiacheng Wei received his Master degree in 2013 from Southwest University of Science and Technology, China. Currently he studies as a Ph.D. candidate in Northumbria University under the supervision of Dr. Fawad Inam and Dr. Thuc Vo. His focus of research is preparation and development of polymer based materials, especially epoxy/graphene nanocomposites. Jiacheng is fully funded for his Ph.D. research studentship by the Northumbria University in Newcastle upon Tyne, UK since 2013.