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The Future of Graphene Commercialization

The evolution of graphene, from its original isolation in 2004, through the establishment of major government programs to advance research (such as the EU's one billion Euro and ten year Graphene Flagship initiative), to the most recent creation of the Graphene Engineering and Innovation Centre (GEIC) at the University of Manchester in the UK has reached a critical pivot point.

Today there are more than 150 identifiable graphene producing companies worldwide with many times that amount declared in mainland China. More importantly, major industrial companies have begun to incorporate graphene-enhanced materials in their products. One of the most visible and high profile of these is the inclusion of graphene enhanced polyurethane parts in the Ford automobile company's Mustang and Ford 150 production cars and trucks. The addition of small amounts of graphene in the material matrix resulted in greatly improved thermal transfer as well as a reduction in vibration and noise.

This presentation will provide an overview of the main forms of graphene commercially available today (CVD single layer graphene, multilayer GNP's, graphene oxides, etc.) and the more than 40 major vertical application markets that have been identified to date (plastics, electronics, composites, structural materials, etc.)

The content presented is based on the day to day interaction of The Graphene Council with its more than 20,000 individual material science and Corporate members, as well as original research, specifically a survey of more than 350 graphene producers, application developers and end users regarding the types of graphene they are using for specific applications and to obtain well defined performance improvement.

The Graphene Council is the leading community in the world for graphene professionals and is an Affiliate member of the Graphene Engineering and Innovation Centre (GEIC) at the University of Manchester in the UK. The mission of The Graphene Council is to advance th commercial adoption of graphene materials globally.