

Graphene Technology Platform at BASF

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Abstract

At BASF, graphene and graphene materials are currently being studied for several potential fields of application. We have established a Graphene Technology Platform aiming at the systematic investigation of this new carbon material fabricated either by top-down or bottom-up procedures. Owing to its appealing electrical conductivity, graphene can be used for conductive formulations and coatings as well as for polymer composite materials with antistatic properties. Also, graphene may serve as a new carbon material thus replacing or complementing traditional carbon black additives in lithium-ion batteries as well as activated carbons in supercapacitor devices. It is also intended to evaluate graphene-based transparent conductive layers for their use in displays, organic solar cells and organic light emitting diodes. A new joint Carbon Materials Innovation Center with the Max Planck Institute for Polymer Research has been inaugurated, with the purpose of exploring these themes. The talk will focus on the recent activities of BASF in the field of graphene and provide an evaluation of this promising material from an industrial point of view.