

Graphene Commercialization Challenges and Opportunities

Kuan-Tsae Huang

CEO, AzTrong

US/Taiwan

Kthuang8@gmail.com

Abstract

There are two different methods for producing graphene. Bottom up and top down. Bottom up uses chemistry to assemble carbon atoms in order to create the monolayer structure known as chemical vapor deposition (CVD). Top down refers to the exfoliation of the stacked layers of graphite into smaller multi-layers graphene. To date, exfoliation is still the best technique for producing a defect-less smaller multi-layer of graphene.

There are many challenges and opportunities for graphene based on its applications, such as:

- How to up-scaling graphene production?
- How to maintain the quality in large quantities of graphene production?
- How to produce the right type of graphene for a particular application?
- How to make graphene consistently?
- How to disperse graphene?
- How to measure graphene?
- How to achieve the real benefits of graphene?
- How to handle graphene effectively?
- How to create graphene enriched products and value?

This talk will try to address some of these issues.