Talga: Emerging high quality scalable graphene supply; path to high performance low eco impact multi-functional product applications

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With its impermeable and conductive nature graphene can replace nano-additives currently used in various applications [1-3]. The current bottlenecks in graphene commercialisation is the availability of large volume, cost-effective high quality few layer graphene/Graphene nano platelets and its effective incorporation. Talga has the capability and resources to bring graphene into the market in big volume with its cost effective industrially scalable process. Further Talga developed technology helps to overcome the compatibility issues by customising dispersion chemistry for graphene to suit existing commercial products.

Coatings & composites may prove to be the most significant demand drivers for graphene in terms of volume consumption and speed to market and Talga made a significant progress in utilisation of Talga electrochemically expanded graphene nano platelets (GNP) & few layer graphene in various advanced coatings / composite products. Technology advancements made and challenges faces during these developments in the areas of coating, composite, energy & building materials will be discussed.

References

[1] Graphene based anti-corrosion coating on copper, RSC Adv., 2018, 8, 499.
[2] Graphene Anti-corrosion surface treatment, Flatchem, 1, 2016, (11-16).
[3] Graphene against corrosion, Nat Nano, 2014. 9(10): p. 741-742.