

Nano Science, Technology and Industry Scoreboard

Graphenest and Hubron to Explore Development and Commercialization of Graphene

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Graphenest and Hubron have entered a strategic partnership to explore the development and commercialization of graphene-based polymer masterbatch and compounds.

In February of this year, <u>Graphene Flagship</u> associated member <u>Graphenest</u> and manufacturing company <u>Hubron International</u> entered a new strategic partnership. Their shared aim is to explore the development and commercialization of graphene-based polymer masterbatch and compounds with unprecedented electromagnetic interference (EMI) shielding performance for electronic enclosures manufacturing.

This new product line will start with a graphene-based thermoplastic suitable to be implemented as a remarkable EMI shielding solution in medium-high and high frequencies (for 5G and beyond).

The agreement brings together Graphenest's knowledge around graphene production, the development of shielding products, and IP expertise, and Hubron International's expertise as a specialist in black masterbatch and conductive polymers for Electric and Electronics parts.

An associated member of the Graphene Flagship since 2017, Graphenest is a nanotechnology company that has been involved in multiple pioneering endeavors – including the partnering project NeuroStimSpinal, which has been developing materials for the recovery of spinal cord injuries. Graphenest provides automotive and electronics sectors with conductive graphene-based EMI shielding solutions. Its primary objective is to replace metals with cost-effective, ultralightweight, and sustainable conductive coatings and plastic systems.

Hubron International is a leading global specialist in masterbatch. They have an extensive

portfolio of specialist grades including conductive compounds, engineering masterbatches, specialist polymers, additive masterbatches with graphene, graphite and other materials to improve end-product properties and performance.

Thanks to new work in this space, the market is now able to use graphene-based shielding solutions to replace the conventional dense, rigid, and time and energy-intensive old-metal enclosures.

"The usage of polymeric compounds based on graphene that can effectively shield high concentrations of microwaves and millimeter waves (5G/6G) will be crucial in the near future," says Bruno Figueiredo, Graphenest's co-CEO.

"We are observing a rise in interest, mostly because more electronics and e-mobility devices are linking to one another. As a result, we can no longer completely rely on traditional, unsustainable metals."

With this in mind, the collaboration between Graphenest and Hubron is especially welcome.

"The combination between Graphenest technology and Hubron's masterbatch and compound expertise will boost the innovation towards the best conductive polymers, specially made for the E-mobility and Electronics industries", says Robert Laurent, Technical Director of Hubron International.

Here at the Graphene Flagship, we are looking forward to seeing how this new collaboration will bring even more different coatings and plastic compound solutions into the market.

Read the original article on Graphene Flagship.