

Nano Science, Technology and Industry Scoreboard

## Tired of Your Tires Always Causing Problems? Graphene is There to Help!



2019-11-27

Gratomic Inc., an advanced materials' provider, has newly achieved a real breakthrough in tire technology with its surface-modified graphene tires that show more than 30% increase in tires' wear resistance, 40% enhancement in both wet and ice braking, and 30% improvement in fuel economy as compared to premium brand tires. This technology is soon to be employed by the leaders of the global tire market.

<u>Gratomic Inc</u>, a vertically integrated graphite to <u>graphenes</u>, advanced materials development company announces the receipt of positive results from extensive testing of its graphene enhanced tires, versus globally recognized, premium brand tires. The Company believes these results represent a breakthrough in tire technology that warrants deployment into the global tire market.

The 18 month development program included a 6-month terrain test in which graphenes enhanced tires ("Gratomic Tires") and premium tires from a globally recognised 'household name' brand ("Brand Tires") were fitted to high mileage, commercial light vehicles, which primarily travelled on A and B roads within the <u>UK</u>. Performance of the tires was data logged throughout the entire test period.

The results of the road test concluded the Gratomic Tires, enhanced with surface engineered graphenes, produced a greater than 30% increase in wear resistance over the competing Brand Tires, equating to an additional +30% mileage before the tire was needed to be replaced.

Furthermore, the results of testing carried out by industry experts employing industry standard dynamic mechanical analysis (DMA) showed a significant improvement in rolling resistance, which indicated a greater than 30% improvement in fuel economy (increased MPG).

Finally, the results showed a greater than a 40% improvement in both wet and ice braking.

"The initial 6-month competitive terrain testing program has demonstrated the economic benefits and advantages of including Gratomic's graphite surface modified graphene fillers within tire elastomers," said Ian Walters, COO Director of Perpetuus Carbon Technology ("Perpetuus"). Mr. Walters went on to say, "The Gratomic tires provided significantly improved performance when compared not only to mass market tires but also premium brand tires. I can confirm that Perpetuus scientists supervised all independent third-party industry expert performance analysis and also the data logged road testing exercise."

Read the <u>original article</u> on SciTech Europa.