

Nano Science, Technology and Industry Scoreboard

Stellantis Invests in Lyten to Push Forward Graphene-enhanced Applications in EV Batteries, Composites and Sensors

2023-05-28 Stellantis and Lyten have announced that Stellantis Ventures, the corporate venture fund of Stellantis, invested in Lyten to accelerate the commercialization of Lyten 3D Graphene[™] applications for the mobility industry, including the LytCell[™] Lithium-Sulfur EV battery, lightweighting composites, and novel on-board sensing.

Lyten will aim to leverage the tunability of the material to enable enhanced vehicle performance and customer experience while decarbonizing the transportation sector. Lyten's tunable materials platform has demonstrated significant reductions in greenhouse gas emissions and will advance the transition to sustainable mobility.

Unlike traditional lithium-ion batteries, Lyten's Lithium-Sulfur batteries do not use nickel, cobalt, or manganese, resulting in an estimated 60% lower carbon footprint than today's best-in-class batteries and a pathway to achieve the lowest emissions EV battery on the global market.

Raw materials for Lithium-Sulfur batteries have the potential to be sourced and produced locally, in North America or Europe, enhancing regional supply sovereignty. This technology will meet the needs of industries seeking lightweight and energy-dense batteries that are free from supply chain disruptions.

Lyten's Lithium-Sulfur battery, composites, and sensor technologies are initially being produced on its 145,000 square foot campus in Silicon Valley. Apart from producing EV batteries, Lyten is working with previous customers to start delivering Lithium-Sulfur batteries and 3D Graphene-infused composites for specialty markets in 2023. Lyten is collaborating with its strategic investors from across multiple industries to apply Lyten 3D Graphene materials to decarbonize additional, carbon intensive sectors beyond transportation, with more announcements planned for later this year.

"We are delighted that Stellantis Ventures, as the venture investment arm of a global automotive innovator, has demonstrated a strong belief in our company and our Lyten 3D Graphene[™] decarbonizing supermaterials," said Dan Cook, president and CEO of Lyten. "Among the automotive product innovations being transformed by Lyten 3D Graphene[™] are Lithium-Sulfur batteries with the potential to deliver more than twice the energy density of lithium-ion, payload-improving lightweighted vehicle composites, and new modes of sensing that do not require chips, batteries or wires. We are committed to advancing each of these applications to Stellantis and the automotive market."

Read the original article on Graphene-Info.