

Nano Science, Technology and Industry Scoreboard

Sparc Technologies Signs Agreement with Queensland University of Technology for Graphene-based Battery Materials

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Sparc Technologies recently announced a Strategic Partnership Agreement with the Queensland University of Technology (QUT), that will support a long term partnership and commitment between the parties, affording Sparc the first right of refusal to commercialize technologies developed from projects Sparc undertakes with QUT. The agreement also provides a framework for long term cooperation whereby Sparc and QUT agree to work together to identify and undertake new projects.

Concurrent with signing the Strategic Partnership Agreement, <u>Sparc</u> has commenced a project with <u>QUT</u> to develop a process for the production of hard carbon using low cost sustainably sourced green bio-waste targeting the Sodium ion battery industry. The hard carbon materials will be characterized and tested in a Sodium ion cell format at QUT's world-class facilities for battery development and testing, including the National Battery Testing Centre (<u>NBTC</u>) and Central Analytical Research Facility (<u>CARF</u>).

The initial term of the Agreement is three years and the main objective is to develop functional materials using graphene and carbon material and related manufacturing process technologies, for a range of applications including the coatings, composites, cementitious and energy industries.

Sparc Managing Director, Mike Bartels commented: "Sparc is excited to join with QUT in a Strategic Partnership, commencing with a project in the battery anode space with the development of a novel process for the production of hard carbon. Using readily available, sustainable bio-waste material will provide Sparc with a strong environmental value proposition when compared with conventional sources of hard carbon. We will be targeting the production of materials for the high growth market of Sodium ion batteries which is displaying significant promise as an alternative to Lithium ion batteries. In addition to enhanced safety for industrial scale energy storage, of great significance is the fact that the

materials used in Sodium ion batteries are accessible and not challenged in supply as is the case with Lithium ion batteries.

The Sustainable Hard Carbon Anode project compliments existing knowledge and skills Sparc has developed through its graphene expertise and the extension of this into renewable energy technologies is a natural fit with Sparc's photocatalytic green hydrogen project."

QUT Lead researcher A/Prof. Deepak Dubal, School of Chemistry and Physics commented: We very much welcome Sparc as a partner with the first project being associated with sustainably sourced bio-waste producing anode material. We expect this will open the door to many more exciting R&D opportunities between us."

Read the original article on Graphene Info.