Development of Functional Conducting Additive Using Innovative Carbon Material GMS (3DC Inc.)

○ Business Plan

This project focuses on researching and developing the application of GMS (Graphene MesoSponge), an innovative carbon material invented at Tohoku University, as a conductive additive for lithium-ion batteries (LIB). We aim to address the critical design challenges of lithium-ion batteries that are difficult to solve with conventional carbon materials lacking structural controllability. By utilizing GMS, which enables precise structural control, we will develop it into a functional conductive additive.

○ Research Outline

To the functional conductive additive GMS to be developed in this project is a material that combines high voltage resistance, electrolyte transportability, and flexibility against compression, which are difficult to achieve with conventional CBs and CNTs.

This project includes the following research and development objectives.
(1) Design and construction of the demonstration plant
(2) Establishment of quality standards to meet customer requirements and acquisition of ISO certification
(3) Development of three synthesized GMS products

City	Year of Establishment	Founder
Sendai, Miyagi	2022	Takuma Kuroda Hirotomo Nishihara

Partner VC	Latest round of Fundraising	Valuation
ANRI	Series A	Non-Disclosure

Business Area/Field	Research Period	Research Grant Amount	International collaborative technology demonstration
Materials	PCA 2025～2027 FY	JPY 999 million	-

Contact Information :
tel : +81-22-797-8073
e-mail : info@3dc.co.jp

Website : https://www.3dc.co.jp/en

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