

3DC 事業紹介





会社概要

社名株式会社3DC代表者黒田 拓馬・西原洋知設立2022年2月仙台市青葉区片平2-1-1
国立大学法人東北大学
産学連携先端材料研究開発センター事業内容炭素材料の開発・製造・販売







東北大学

-日本における材料研究の中心地





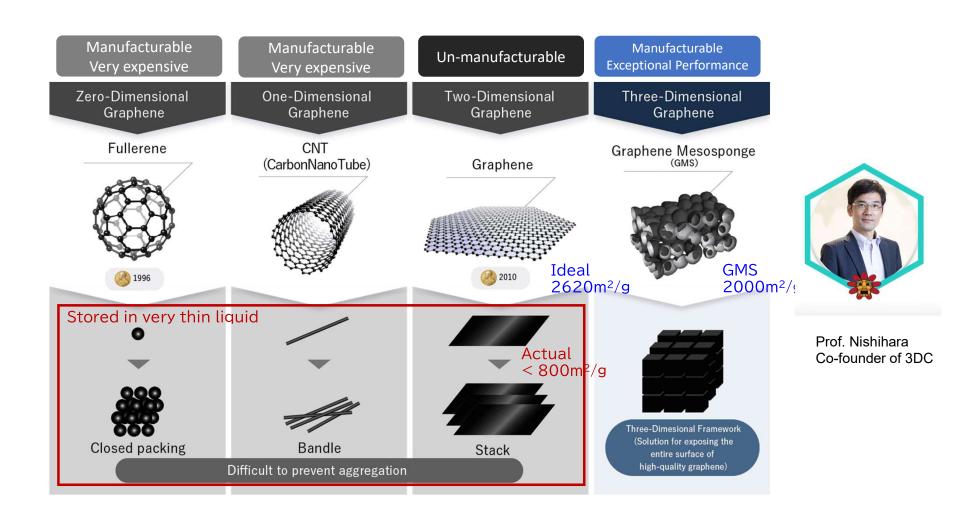
Material

2023-09-01 University News

Tohoku University the Only Candidate Currently on MEXT's "University for International Research Excellence" Shortlist

グラフェンメソスポンジとは?

-東北大学で発明された、新しいナノカーボン材料



グラフェンメソスポンジとは?

-アカデミアでは高い評価を獲得している新しいナノカーボン材料







Professor Sir Andre Geim

The University of Manchester

Sir Andre Geim is Regius Professor and Royal Society Research Professor at The University of Manchester. He has received many international awards and distinctions, including the John Carty Prize from the US National Academy of Sciences and the Copley Medal from the Royal Society. Most notably, he was awarded the 2010 Nobel Prize in Physics for his ground-breaking work on graphene.

More Info

Hirotomo Nishihara

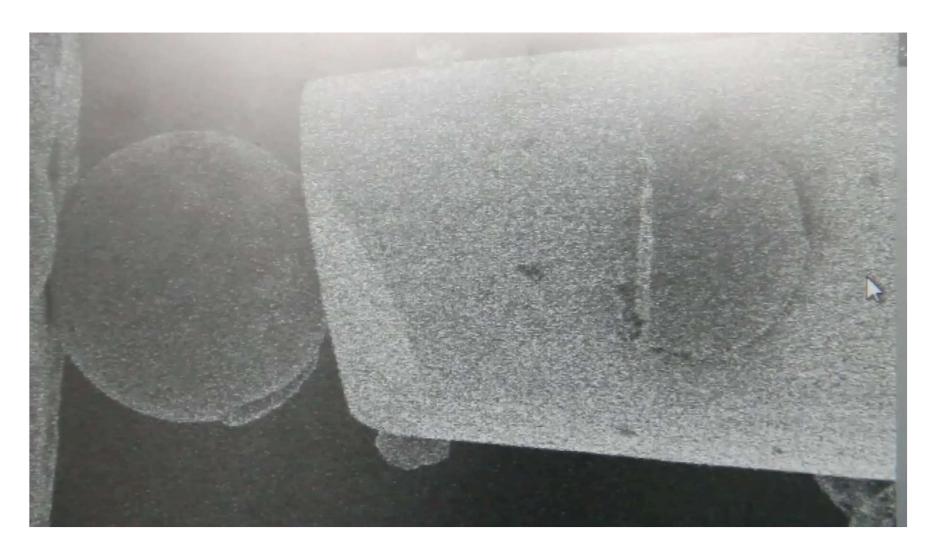
Tohoku University

Prof. Hirotomo Nishihara received his PhD degree in the field of Chemical Engineering at Kyoto University in 2005. At the same year, he got a position of assistant professor at Institute of Multidisciplinary Research for Advanced Materials, Tohoku University. Since then, he has been working on carbon materials, porous materials, and their applications for energy storage, such as supercapacitors, hydrogen storage, and lithium-ion batteries. In 2011, he was promoted to an associate professor, and he has become a member of PRESTO, JST in 2013. He has received many awards such as the Japan Carbon Award for Young Researcher (2008), the Young Researcher Award of the Carbon Society of Japan (2010), the Tokin Science and Technology Award (2012), and BCSJ Award (2014), Gottfried Wagener Prize 2019 "Development of advanced template techniques for functional carbon materials (2019).



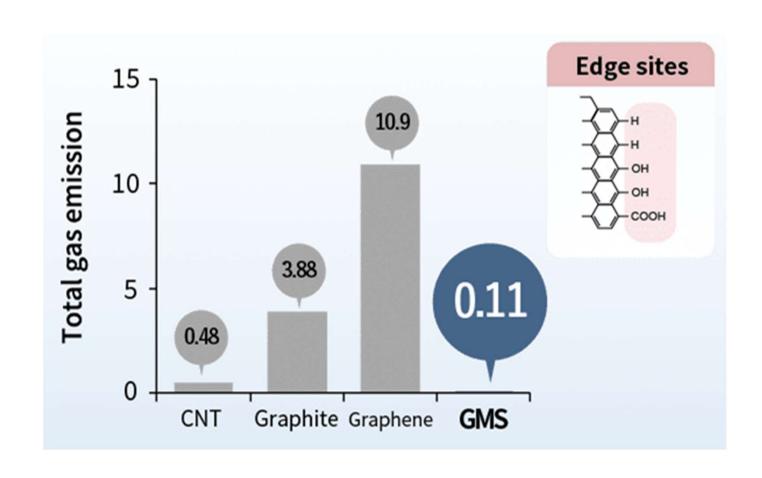
特徴1: 物理的に強い

- 電極内の膨張収縮を緩和する



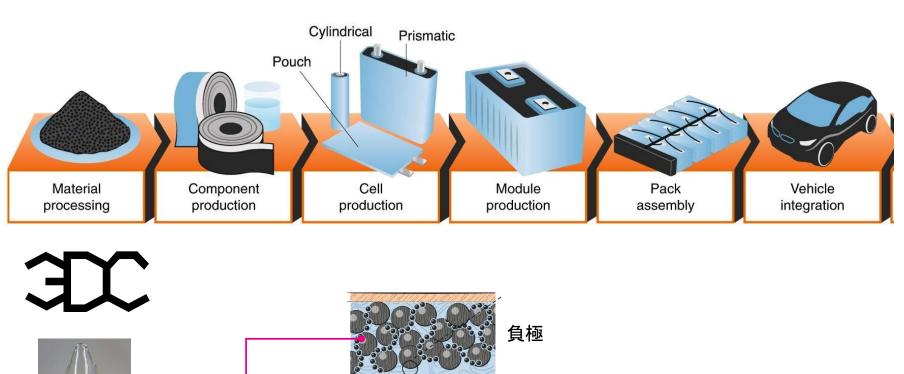
特徴2: 化学的に強い

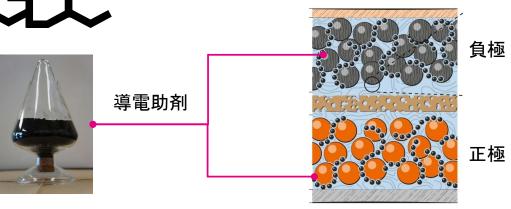
- 化学的にタフな使い方にも耐える(高電圧で使ってもガスが出ない)



リチウムイオン電池への応用:導電助剤

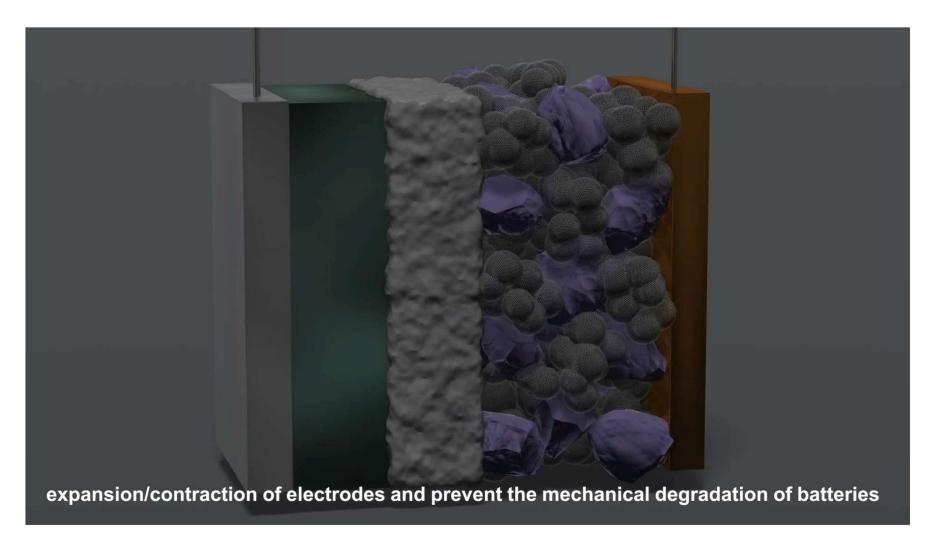
-グラフェンメソスポンジは、リチウムイオン電池の劣化抑制・長寿命化に貢献します





リチウムイオン電池への応用:導電助剤

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事業体制:東北生まれ、中部育ち

- 岐阜県の電気炉メーカー様と密に連携し、材料製造を実施中
- ・ サプライチェーンの多くが<u>中部地方</u>に存在(製造装置、原材料、顧客工場)

