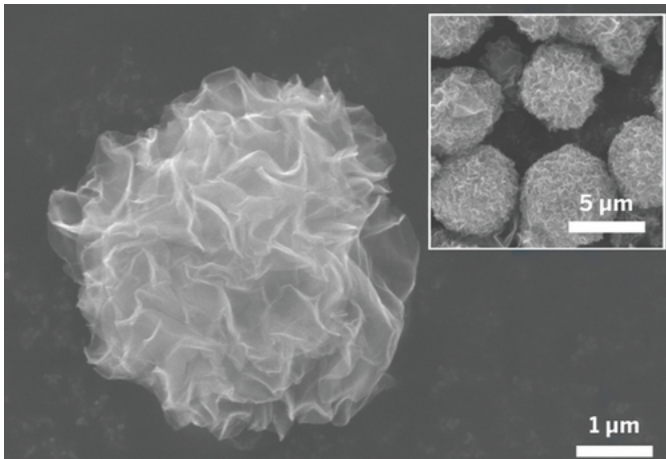


Deep Fried Graphene = Better Batteries?

Written by Marco Attard
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Deep frying might not simply be a method for the making of tasty chicken-- according to S. Korean researchers it might also be key in the making of batteries and supercapacitors with enhanced power storage capabilities.



In this case the "deep frying" consists of spraying graphene oxide droplets into a hot (160°C) blend of acid and organic solvent. The process evaporates the water inside the material, causing it to clump into 3-dimensional "pom-poms."

The 3D pom-poms are important, as battery electrodes require a large material surface area for the exchange of electrons. To test such capabilities the researchers built 1 x 1cm electrodes full of 3D graphene, which they say show a capacitance of 151 farad per gram compared with 118 F/g for the plain graphene electrode.

The S. Korean researchers are not the first to create 3D graphene, but they say the "deep frying" method is "direct, simple, and much easier to scale up for industrial applications," meaning deep-fried graphene pom-poms might find consumer applications sometime in the future.

Go [Deep-Frying Graphene Spheres for Energy Storage](#)