

REDUCED GRAPHENE OXIDE (RGO)

Invention Summary:

From early as 18th century world's purest vein graphite producers attributed from Sri Lanka (then Ceylon). Industrial Technology Institute (ITI) Sri Lanka, discloses an innovative technology to produce Reduced Graphene oxide (rGO) on mass scale using Sri Lankan pure vein graphite of +99 % carbon.

Technology Overview:

rGO is produced by thermally reducing graphite oxide which is formerly produced from Sri Lankan vein graphite using a chemical method, ITI transfer the technology to graphite industry and the industry progresses the commercialization process. ITI supplies rGO for research purpose on demand.

Potential Application:

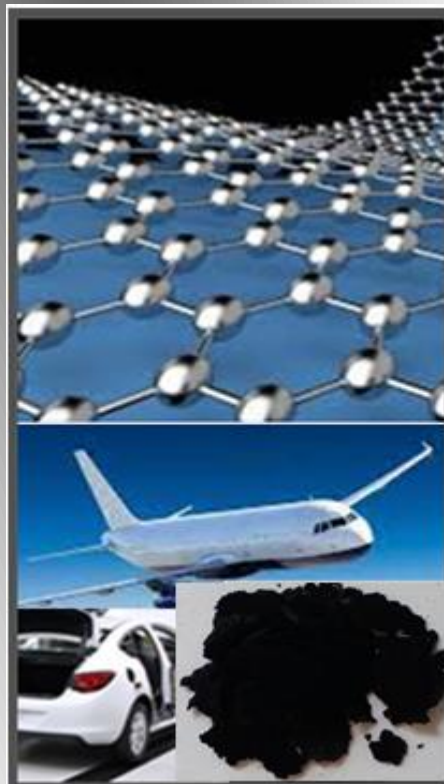
Energy Storage Devices, Electronic Industry, Transport and Construction Industry, Bio-medical Applications, Advanced Materials, Sensors.

Advantages of the Products:

- High Surface Area - *ca.*500 m²/g
- High Conductivity - *ca.*833 S/m (at 0.8 MPa)
- High Graphitic Carbon(*sp*²)- *ca.* 92%
- Large Lateral Size (D50)- *ca.* 45 μm
- Low Bulk Density - *ca.*0.02g/cm³

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