

GRAPHENE OXIDE (GO)

Invention Summary:

Graphene Oxide (GO) is a highly valuable modern material (>1000 times value addition to graphite) which is producible from Sri Lankan natural graphite. Industrial Technology Institute (ITI) of Sri Lanka, discloses an innovative technology to produce GO on mass scale.

Technology Overview:

GO is cost effectively produced on mass scale by oxidizing graphite with a purity of +99% using a chemical method. ITI transferred the technology to graphite industry and the commercialization is progressing at graphite industry. At present ITI supplies GO for research purpose based on client demand.

Potential Application:

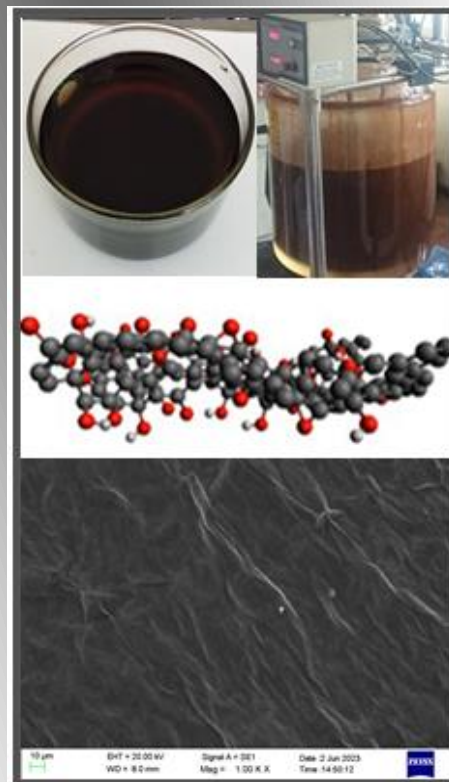
Bio-medical Applications, Construction, Space and sport industry, Advanced Material Synthesis, Composite and Polymer Industry.

Advantages of the Products:

- Bulk Density- *ca.* 1.05 g/cm²
- Carbon / Oxygen Ratio- *ca.* 2:3
- Large Lateral Size (D50)- *ca.* 25µm
- Total Solid Content (TSC)- *ca.* 5 g/ml
- High Purity > 99%

Inventor/s:

Dr. Iresha Kottegoda
Dr. R. Chinthaka L. De Silva
Dr. L.D.C. Nayanajith
Mr. Lahiru Abeykoon



Technology Information:

Director
Materials Technology Section
Industrial Technology Institute
No.363, Baudhaloka Mawatha
Colombo 07

Tel: +94112379851
+94112379849

E-mail: mts@iti.lk
dir_mts@iti.lk