

## Graphene-Aurora Program

August 16, 2023 • vajiramandravi.com



### About Graphene-Aurora Program:

- The program shall be implemented by **Digital University Kerala** with joint funding from **Ministry of Electronics & Information Technology** (MeitY), and Government of Kerala and Industry partners, **Carborundum Pvt Limited** joined as one of the main industry partners.
- It shall nurture the **deep/emerging Graphene technology & innovation ecosystem** that can guide, develop, implement, and support SMEs and startups to commercialize developed graphene technologies for scale adoption.
- Creation of a commercialization eco-system for graphene as an emerging technology would help India take a pole position in the world's new material market.

### Key facts about Graphene

- Graphene is a material that is **extracted from graphite and is made up of pure carbon**.
- It is one of the most important elements in nature which we find in daily objects like the lead of a pencil.
- It is the world's **thinnest, strongest, and most conductive material** of both electricity and heat.

- It conducts electricity better than copper.
  - It is 200 times stronger than steel but six times lighter.
  - It is almost **perfectly transparent as it absorbs only 2% of light**.
  - It is impermeable to gases, even those as light as hydrogen and helium.
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## Q1) What is conductivity?

Conductivity refers to the ability of a material to conduct electric current. It is a measure of how well a substance allows the flow of electric charges, such as electrons. Materials with high conductivity, like metals, allow electric current to pass through them easily, while insulators have low conductivity and hinder the flow of electric charges.

**Source:** [MeitY Secretary Shri Alkesh Kumar Sharma launches the 'Graphene-Aurora Program'](#)

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