



# IEDC NEWSLETTER

October 26, 2022 / Vol 4

## YIP Selected Ideas

Young Innovators Programme (YIP) by Kerala Development and Strategic Innovation Council (K-DISC).

A total of 28 students from SNGIST applied their ideas for the YIP 2021 - 22. The following students and their ideas are selected for the Young Innovators Programme 2022.

Idea : Communication device for Bike riders and their passengers.  
Team members : Jenin Joseph, Alan K Anil, Althaf Hussain M U.

## SALT Batch 2

The Start-up Awareness and Leadership Training is a programme aims to create awareness about entrepreneurship opportunities among school students and to inculcate scientific spirit among the among young minds.

The students from IEDCs are the SALT resource person. The SALT programme will cover basics of entrepreneurship, leadership, innovation, personality development, Communication, Future Technologies etc..

The following members are the resource person from SNGIST IEDC of second batch, trainers for the for KSUM : Alan K Anil, Sakbeer K K, Jenin Joseph, Fareedul Sahla, Adarsh Varghese K J.

## Coding 101

The IEDC SNGIST offered foundation course on coding. The first batch classes are completed during Aug-Sept. The second batch classes will be on Oct - Nov session. The Level one training session offered foundation on Introduction to Github, Command Line and Scratch.

**CODING 101**  
A Foundation Course on how to get started with programming

**STARTING FROM 10<sup>TH</sup> OCTOBER**  
4.15 pm to 5.00 pm  
ANY STUDENT INTERESTED IN CODING CAN APPLY  
**REGISTER NOW**

Level 1 | Topics

# Coding 101



# Project Recognition

The IEDC recognised the project executed by a team of 2018 batch Mechanical Engineering students lead by Mr. Ebi Varghese, CEO SNGIST IEDC. The project ,Multi Gym, is procured by the college for the Health club of Physical Education department to be utilised for both Arts and Technical campus students.



## KSUM students lead of SNGIST IEDC

The following students will lead the SNGIST IEDC



**Adarsh  
Varghese K J**

**IEDC Lead**

**INMCA S9**



**Jenin  
Joseph**

**Creative and  
Innovation Lead**

**B.Tech CSE S5**



**Alan K  
Anil**

**Technology  
Lead**

**B.Tech CSE S5**



**Fareedul  
Sahla**

**Quality and  
Operations Lead**

**MCA S3**



**Diya**

**Finance  
Lead**

**B.Tech CSE S3**



**Thajudheen  
Alighan**

**Community  
Lead**

**Diploma ME S5**



**Althaf Hussain  
M U**

**Branding and  
Marketing Lead**

**B.Tech CSE S5**



**Fareedul  
Sahla**

**Women  
Entrepreneurship  
Lead**

**MCA S3**



# Graphene and batteries

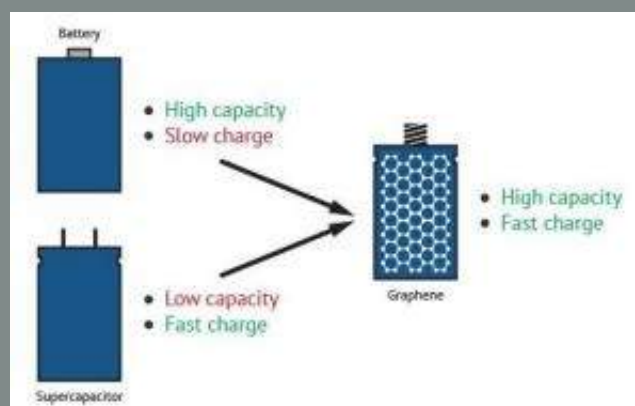
Graphene, a sheet of carbon atoms bound together in a honeycomb lattice pattern, is hugely recognized as a wonder material due to the myriad of astonishing attributes it holds. It is a potent conductor of electrical and thermal energy, extremely lightweight chemically inert, and flexible with a large surface area. It is also considered eco-friendly and sustainable, with unlimited possibilities for numerous applications.

LFP (Lithium Iron Phosphate) batteries, that is a kind of rechargeable Li-ion battery. It has a lower energy density than other Li-ion batteries but a higher power density (an indicator of the rate at which energy can be supplied by the battery). Enhancing LFP cathodes with graphene allowed the batteries to be lightweight, charge much faster than Li-ion batteries and have a greater capacity than conventional LFP batteries.

In addition to revolutionizing the battery market, combined use of graphene batteries and graphene supercapacitors could yield amazing results, like the noted concept of improving the electric cars driving range and efficiency.

## Batteries and supercapacitors :

While there are certain types of batteries that are able to store a large amount of energy, they are very large, heavy and release energy slowly. Capacitors, on the other hand, are able to charge and discharge quickly but hold much less energy than a battery. The use of graphene in this area, though, presents exciting new possibilities for energy storage, with high charge and discharge rates and even economical affordability. Graphene-improved performance thereby blurs the conventional line of distinction between supercapacitors and batteries.



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