Report on

Hands-on workshop on 'AC-DC Inverter LED bulb assembly'

20, 21 September 2021 Organized by Department of Physics St. Joseph's College (Autonomous) Irinjalakuda

A two-day workshop on Hands-on workshop on 'AC-DC Inverter LED bulb assembly' was organized by the Department of Physics, St. Joseph's College (Autonomous) Irinjalakuda on 20th and 21st September 2021. The main objective of the workshop was to manufacture a high-performance inverter LED bulb in bulk quantity in a cost-effective way and to develop electronic skills in the participants. The programme also aimed to make the community aware about the importance and usefulness of energy efficient devices. The workshop adopted the processes such as lecture session, demonstration-cum-discussion and group work.

The workshop started with an inauguration ceremony and was inaugurated by Dr. Sr. Asha Therese, Principal, St. Joseph's College (Autonomous) Irinjalakuda. Mr. Thomas P J, Technical instructor of Electronics at Victory Institute, Irinjalakuda, graced the occasion as the resource person of the programme. The programme was felicitated by the Head of Department of Physics, Ms. Mary Gisby Poulose. There were 55 numbers of participants who made the workshop a great success. The programme was conducted from 9.30 a.m. to 4.30 p.m. each day.

The workshop started with a class on electronics in which Mr. Thomas deeply explained about the applications of electronics in our homes. He mentioned how participants would be benefited from this kind of programme by making our own contributions to repair electrical appliances in our own houses. He gave the participants general awareness about lab maintenance, electrical components, practical applications etc. It was a lively interactive session. The participants could easily make out the fundamentals of electronic components. During the post-lunch session, participants were given training of soldering wires using a soldering iron and solder wire and how to connect them to a rechargeable battery. Also, participants were also trained to find the resistance value of resistors based on their color code using an app.

On the second day of the workshop, during the pre-lunch session, Mr Thomas demonstrated how to make an inverter LED bulb by explaining each and every component of it such as lens, LED chips, driver board, housing, B22 base, etc. Participants put in their efforts to make 25 inverter LED bulbs.

It was a great opportunity for the participants to develop practical skills. The workshop was concluded with a valedictory session. Mary Gisby Poulose congratulated all for the participants for the successful completion of the entire program. At the end of the session, feedback was provided by the students and teachers. The manufactured bulbs were contributed to the local community.























'AC-DC LED Inverter Bulb Assembly'

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Hands-on training Workshop organized by Department of Physics, St. Joseph's College (Autonomous) Irinjalakuda on 'AC-DC LED Inverter Bulb Assembly'

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Date: 20, 21 September 2021

Time: 9.30 am to 3.30 pm

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