

## **SKILL DEVELOPMENT WORKSHOP ON LED BULB MANUFACTURING**

Dept. of Physics, St. Joseph's College (Autonomous), Irinjalakuda

25<sup>th</sup>, 26<sup>th</sup> January 2018

As the world is heading towards severe energy crisis, there is an ever-increasing need for alternate energy resources and energy efficient devices. One particular field, which has witnessed tremendous breakthroughs, of late, in terms of energy efficiency, is solid state lighting (SSL) or Light emitting diodes (LED). LED bulbs are 80-90% more energy efficient than conventional incandescent bulbs and are several times more durable, with much lower greenhouse gas emission. In order to familiarize the students with the practical aspects of this important technology and provide valuable hands-on experience, the Department of Physics conducted a two-day skill-development Workshop on 'LED bulb manufacturing' for the outgoing degree students on 25<sup>th</sup> & 26<sup>th</sup> January, 2018.

The principal of St. Joseph's College (Autonomous), Dr. Sr. Christy inaugurated the programme on 25<sup>th</sup> January at 9.00 AM. The technical session was handled by Mr. Thomas P J, Luna Institute of Engineering Technology, Irinjalakuda. Around 42 students attended this programme on both days, with faculty and staff monitoring their activities. At the end of the technical session, all the students were able to build LED bulbs on their own which were later given to them to be used at their homes.

The aim & scope of the workshop was to empower students with technical skills needed for industry as well as day-to-day life. It would also enhance the employability of students. This workshop was a major step to sensitize students towards green technologies and make students socially responsible.

The learning outcome of this workshop was that the student was able to appreciate the need for energy efficient devices and design opto-electronic circuits. All the participants were able to build LED based lighting-circuits in serial manner and thus learnt to design strategies to reduce electricity usage at home.

The Department of Physics, St. Joseph's College (Autonomous), Irinjalakuda acknowledges the financial support from CPE fund, UGC, India.

## Expenditure

Sl. No.	Item	Amount	Invoice No.	Date
1	Electronic components	2898	C4508	20-01-2018
2	Cable	1000	C4509	20-01-2018
3	Chemicals & connecting wire	2660	C4557	22-01-2018
4	Multimeter, soldering iron & lead	11770	C4559	22-01-2018
5	Fiber glass	165	683	22-01-2018
6	Remuneration for the resource person	750	-	25-01-2018
7	Remuneration for the resource person	750	-	26-01-2018
	<b>Total</b>	<b>19993/-</b>		

